

**FINAL  
REMOVAL ACTION REPORT**

**FOR THE  
GULFCO MARINE MAINTENANCE  
SUPERFUND SITE  
FREEPORT, TEXAS**

**PREPARED BY:**

**Pastor, Behling & Wheeler, LLC  
2201 Double Creek Drive, Suite 4004  
Round Rock, Texas 78664  
(512) 671-3434**

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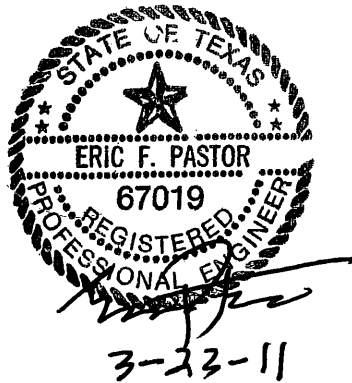
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## LIST OF ACRONYMS

ACM – Asbestos Containing Material  
AST – Aboveground Storage Tank  
BHHRA – Baseline Human Health Risk Assessment  
COD – Certificate of Destruction  
EEI – Effective Environmental, Inc.  
EPA – United States Environmental Protection Agency  
FSP – Field Sampling Plan  
GRG - Gulfco Restoration Group  
NPL – National Priorities List  
OVM – Organic Vapor Meter  
PCE - Tetrachlorethene  
PBW – Pastor, Behling & Wheeler, LLC  
ppmv – parts-per-million by volume  
RI/FS – Remedial Investigation/Feasibility Study  
SVOC – Semi-Volatile Organic Compound  
TCEQ – Texas Commission on Environmental Quality  
TCE - Trichloroethene  
VOC – Volatile Organic Compound

**REMOVAL ACTION CERTIFICATION**

Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Eric F Pastor, P.E.  
P.E. No. 67019  
Principal Engineer  
Pastor, Behling & Wheeler, LLC

## **1.0 INTRODUCTION**

The United States Environmental Protection Agency (EPA) named the former site of Gulfco Marine Maintenance, Inc. (Gulfco) in Freeport, Brazoria County, Texas (the Site) to the National Priorities List (NPL) in May 2003. On October 26, 2010, the EPA filed and executed an Administrative Settlement Agreement and Order on Consent for Removal Action (Settlement Agreement) (EPA, October, 2010) addressing the former aboveground storage tank farm (AST Tank Farm) located in the southern portion of the Site. The Settlement Agreement required the removal of ASTs that contain hazardous substances from the barge cleaning operations, in accordance with the Removal Action Work Plan included as Appendix D of the Settlement Agreement (included as Appendix A to this report). Pastor, Behling & Wheeler, LLC (PBW), coordinated the Removal Action of behalf of the Settlement Agreement Respondents LDL Coastal Limited LP (LDL), Chromalloy American Corporation (Chromalloy), and The Dow Chemical Company (Dow), collectively known as the Gulfco Restoration Group (GRG), and Parker Drilling Company, which, while not a Respondent to the Settlement Agreement, recently reached an agreement to participate with the Respondents in the Removal Action. Figure 1 provides a map of the Site vicinity, while Figure 2 provides a Site map.

### **1.1 PURPOSE**

Pursuant to Paragraph 42 of the Settlement Agreement, this Removal Action Final Report summarizes the actions taken to comply with the Settlement Agreement, in accordance with the Removal Action Work Plan (Appendix A). Specifically this report documents removal and proper disposal of hazardous liquids and solids contained in the ASTs; removal, demolition and disposal of the tanks in the AST Tank Farm; and decontamination of the AST Tank Farm containment areas.

### **1.2 SITE BACKGROUND**

The Site is located in Freeport, Texas at 906 Marlin Avenue (also referred to as County Road 756) (Figure 1). The Site consists of approximately 40 acres within the 100-year coastal floodplain along the north bank of the Intracoastal Waterway between Oyster Creek approximately one mile to the east and the Texas Highway 332 bridge approximately one mile to the west. Marlin Avenue divides the Site into two primary areas (Figure 2). For the purposes of

descriptions in this report, Marlin Avenue is approximated to run due west to east. The property to the north of Marlin Avenue (the North Area) contains some upland areas created from dredge spoil, but most of this area is considered wetlands. The North Area is not addressed by this report. The 20-acre upland property south of Marlin Avenue (the South Area) was created from dredged material from the Intracoastal Waterway and developed for industrial uses. It contains multiple structures, a dry dock, two barge slips connected to the Intracoastal Waterway, and the AST Tank Farm, which is the subject of this report.

The AST Tank Farm consisted of two adjacent concrete beamed areas, referred to hereafter as the North Containment and the South Containment Areas. Six ASTs were located in the North Containment Area (a seventh tank, Tank No. 100, which was empty, was removed from the Site in September 2008 by Hurricane Ike storm surge), and eight ASTs were located in the South Containment Area. The tank locations and designations are shown on Figure 3, and the tanks and their contents are summarized in Table 1. The tanks were used to store product heels and wash waters associated with barge cleaning operations.

The South Area is zoned as “W-3, Waterfront Heavy” by the City of Freeport. This designation provides for commercial and industrial land use, primarily port, harbor, or marine-related activities. Restrictive covenants prohibiting any land use other than commercial/industrial and prohibiting groundwater use have been filed for all parcels within both the North and South Areas.

Adjacent property to the north, west and east of the North Area is unused and undeveloped. Adjacent property to the east of the South Area is currently used for industrial purposes while the property directly to the west of the Site is currently vacant and previously served as a commercial marina. The Intracoastal Waterway bounds the Site to the south. Residential areas are located south of Marlin Avenue, approximately 300 feet west of the Site, and 1,000 feet east of the Site.

### **1.3 REPORT ORGANIZATION**

The Removal Action Final Report has been organized to include information specified by the Settlement Agreement. A summary of the Removal Action is provided below in Section 2. Sampling and analysis activities performed during the Removal Action are discussed in Section 3. Removal Action conclusions are provided in Section 4. References are listed in Section 5.

Supporting documentation for the Removal Action, including photographs, waste disposal manifests, tank Certificates of Destruction (COD), laboratory analytical reports and other related reports/information, is provided in the report appendices.

Pursuant to Settlement Agreement requirements, a Draft Removal Action Report was submitted within 120 days of the Settlement Agreement Effective Date of October 29, 2010. Also per Settlement Agreement requirements, this Final Removal Action Report is being submitted within 14 days of receipt of EPA's March 9, 2011 letter approving (with modifications) that draft report. All tank content removal, tank decontamination, tank demolition and containment area decontamination field activities were completed within the 90 days of the Effective Date as also specified in the Settlement Agreement. However, due to a temporary suspension in operations at the incinerator used for disposal of hazardous solids generated during the Removal Action, nine roll-off boxes of hazardous solids could not be shipped from the Site to the disposal facility until after the 90-day deadline (January 27, 2011). A 30-day extension to this deadline was requested on January 26, 2011 and was granted by EPA on January 31, 2011. Additional delays in obtaining disposal "slots" at the incinerator required a second extension request to March 25, 2011, which was granted by EPA on February 23, 2011. Due to these delayed waste shipment dates, not all of the Removal Action supporting documentation described above has yet been received from the Removal Action contractor, Effective Environmental, Inc. (EEI). All such documentation that is not available for inclusion in this Final Removal Action Report will be submitted as addendum to the report.

## **2.0 REMOVAL ACTION SUMMARY**

The Settlement Agreement provided for completion of all field activities within 90 days from the effective date of October 29, 2010. EEI mobilized equipment and materials to the Site and began field activities on November 15, 2010. EEI demobilized all equipment from the Site (except for the roll-off boxes awaiting disposal slots as described previously) on January 27, 2011.

The Removal Action included characterization and management of water accumulated in the AST Tank Farm containment areas; removal and disposal of liquid wastes from the tanks; and solidification, removal and disposal of non-liquid (solids and sludge) wastes from the tanks. Following wastes removal and tank decontamination, the tanks were demolished. The North and South Containment Areas were decontaminated and the concrete containment beams were breached so that rainfall will freely drain from the structures. Piping, metal “cat-walks”, and a steel hopper-like structure located within the North Containment Area were demolished and removed. A metal walled structure located immediately to east of the North Containment Area was also demolished and removed. The Removal Action also included an asbestos survey, and the removal and disposal of debris located inside and east of the containment areas. The Removal Action is discussed below; photographs documenting the Removal Action are included in Appendix B.

### **2.1 MANAGEMENT OF ACCUMULATED WATER**

In April 2010, PBW collected samples of accumulated water from the North and South Containment areas. Based on analytical results from these samples, PBW on behalf of the GRG, submitted an Industrial Wastewater Permit Application Abbreviated Technical Report to the Texas Commission of Environmental Quality (TCEQ) requesting discharge of accumulated water from the containment areas. On July 27, 2010, the TCEQ issued a letter to Gary Miller of EPA establishing criteria and authorizing discharge of accumulated water from the containment areas into the Intracoastal Waterway (Appendix C). Following confirmation that the pH of water in the containment areas met the discharge criteria and prior to commencing other Removal Action activities, approximately 15,000 gallons of water from the North Containment Area and approximately 13,500 gallons of water from the South Containment Area were discharged to the Intracoastal Waterway on November 15 and 16, 2010.

Following a rain event at the Site in late December 2010 during performance of the Removal Action, accumulated water from both the North and South Containment Areas was sampled a second time on December 30, 2010. The analytical results from the sample collected from the South Containment Area met discharge criteria (Table 2); and a total of approximately 17,000 gallons of accumulated water were discharged from the South Containment Area to the Intracoastal Waterway on January 5, 6, and 10, 2010. The analytical results for the North Containment Area water sample did not meet discharge criteria (Table 2); and a total of approximately 6,800 gallons of impacted water were pumped from the North Containment Area into tanker trailers and transferred off-site for disposal. One tanker containing approximately 1,800 gallons of this impacted water was transported from the Site to the Clean Harbors, Deer Park facility on January 6, 2011 (included with other Site aqueous wastes). A second tanker containing approximately 5,000 gallons of impacted water from the North Containment Area was transported to Clean Harbors on January 27, 2011. A summary of liquid wastes shipments from the Site during the Removal Action is provided in Table 3, and available waste manifests documenting the transport of the aqueous wastes from the Site are provided in Appendix D.

A third water sample was collected from the North Containment Area on January 18, 2011, after excavation of impacted soils, removal of potentially impacted base material (caliche) from the floor of the containment area, backfilling of the excavated area, and Site restoration was completed (detailed below under Containment Area Decontamination). Analytical results from that water sample indicated that accumulated water in the North Containment Area after completion of the Removal Action, met discharge criteria (Table 2). Following receipt and evaluation of those analytical results accumulated water in the North Containment Area was released by breaching the containment area wall on January 27, 2011. The South Containment Area wall was breached on January 18, 2011 following decontamination and backfilling of the trenches with imported sandy clay soil as detailed in Section 2.6. Sampling locations and analytical results for the accumulated water samples are discussed in Section 3.0.

## **2.2 ASBESTOS INSPECTION**

On November 16, 2010 Phase Engineering, Inc. performed an inspection for potential asbestos containing materials (ACM) within the former AST Tank Farm. Mr. Neal Barnes performed the inspection and collected samples of potential ACM at seven different locations. These samples included debris, gaskets and insulation material. A letter report summarizing the findings of the

asbestos inspection is provided in Appendix E. One of the samples collected by Mr. Barnes was found to contain friable asbestos. The asbestos was in a flange gasket located on the east end of Tank No. 10. In order to avoid disturbing this material during tank demolition, EEI used a cutting torch to cut the entire flange containing the gasket out of the end of Tank No.10 and placed the flange in a metal over-pack drum on December 9, 2010. The over-pack was transported to the EEI yard for temporary storage on January 27, 2011 and was disposed at the Waste Management Coastal Plains Landfill on March 22, 2011. Copies of EEI's demolition permit with the City of Freeport, the Texas Department of State Health Services Asbestos/Demolition Notification Form completed by EEI for this work, and related correspondence are included in Appendix E.

### **2.3 LIQUID WASTES HANDLING AND DISPOSAL**

Removal of liquids from the ASTs was started on November 17, 2010 and completed on December 7, 2010. A tanker load of water transported to Clean Harbors on January 6, 2011 contained a mixture of water accumulated during tank decontamination; water recovered from tanks during sludge solidification and mixing; and impacted water from the North Containment area.

Liquids were removed from the ASTs using a pneumatic diaphragm pump, by inserting a suction hose directly in the tank to be drained and pumping into a tanker trailer. To the extent practical, aqueous liquids were separated from non-aqueous liquids (hydrocarbons), in order that hydrocarbons could be used for fuel blending at the disposal facility.

Removal of liquid wastes from the ASTs was performed using a closed discharge system, with the tanker air vent connected to a carbon canister. The "closed" pumping system, along with the carbon canister, was designed to control the release of fugitive emissions during pumping. Air monitoring was conducted using organic vapor monitors (OVM) during pumping activities to ensure criteria established in the Work Plan were not exceeded [sustained (more than 60 seconds) organic vapor measurements were to remain less than 10 part-per-million by volume (ppmv) in the work zone]. In order to minimize the potential for a release of hazardous liquids outside the containment areas, pumps and hoses were kept inside the concrete containment beams as much as possible and plastic liner was placed beneath hoses outside the containment beams. Tanker trailers were staged inside portable containment to mitigate the potential for a release at hose connections and valves on the tanker.

Approximately 2,300 gallons (21,760 pounds) of non-hazardous aqueous liquids were transported to the Waste Management Coastal Plains facility in Alvin, Texas for disposal. All hazardous liquids, both aqueous and non-aqueous, were transported to the Clean Harbors facility in Deer Park, Texas and disposed of by incineration. Three tanker loads of aqueous liquids were rejected by Clean Harbors due to the presence of viscous hydrocarbons in the load. In each case, these rejected loads were returned to the Site where aqueous liquids were pumped into one of the on-site ASTs for temporary storage, and the viscous hydrocarbons were removed from the tanker and added to sludge in one of the on-site ASTs and solidified.

During the Removal Action approximately 74,000 gallons (612,032 pounds) of aqueous liquids and approximately 14,000 gallons (117,820 pounds) of non-aqueous liquids (hydrocarbons) were transported to Clean Harbors for incineration. All waste liquids were transported from the Site by a licensed waste transporter. Table 3 provides a summary of the quantities and disposition of all liquid wastes removed from the ASTs. Available wastes manifests for liquid wastes transported from the Site are provided in Appendix D.

## **2.4 SOLID WASTES HANDLING AND DISPOSAL**

Following the removal of liquids from all of the ASTs, a combination of cutting torches and hydraulic shears were used to open the tanks to allow for solidification of the remaining sludge (and solids). Solidification to the point that there were no free liquids in the wastes was required by the disposal facility, and was accomplished by adding and mixing fly ash to tank contents after liquids were removed. A total of approximately 210,000 pounds (105 tons) of fly ash was required to facilitate solidification. Once sufficiently solidified, sludge was transferred to water-tight hazardous waste containers (roll-off boxes) lined with sealable water-tight liners, using the track hoe bucket, and by hand shoveling the last of the sludge from most of the tanks. Air monitoring was conducted using an OVM during solidification and sludge removal to monitor organic vapor concentrations in order to stay within Work Plan criteria.

Wastes solids were removed from the ASTs, loaded into roll-off boxes and transported off-site for disposal during the period from December 13, 2010 through January 6, 2011. One additional roll-off box containing a small amount of sludge from the final clean out of Tank No. 6 along with contaminated debris from the demolition of Tank No. 2, was removed from the Site on

February 8, 2011. Roll-off boxes loaded with sludge were transported to the Clean Harbors facility in Deer Park, Texas where the sludge (hazardous solids) was incinerated. During the course of the Removal Action, five roll-off boxes of sludge were rejected by Clean Harbors due to the presence of free liquids, and returned to the Site for additional solidification. In each case sorbent material was added to the sludge in the roll-off box and the box was transported back to Clean Harbors. A total of approximately 812,652 pounds of hazardous solids were disposed of by incineration at the Clean Harbors facility. A summary of all solid wastes transported from the Site during the Removal Action is provided in Table 4 and copies of available wastes manifests are provided in Appendix D.

## **2.5 AST DECONTAMINATION, DEMOLITION AND DISPOSAL**

After all sludge was removed, the tanks were cleaned by scraping, brushing, steam-cleaning, and when necessary spraying and brushing with surfactants to remove any remaining oily residue. Tanks were then cut using, a cutting torch or hydraulic shears, and crushed with the track hoe. All tanks were demolished on-site, except Tank No. 14, which was a thick walled tank (greater than 1-inch thick steel). Tank No. 14 had holes cut to render it unusable and was transported off-site in two pieces. All scrap metal from the Removal Action including tanks and tank pieces were transported to Proler Recycling in Houston, Texas and added to their steel recycling. Copies of available bills of lading and CODs for ASTs are provided in Appendix F.

## **2.6 CONTAINMENT AREA DECONTAMINATION**

### **2.6.1 South Containment Area**

Following the removal of all tanks from the South Containment Area, and in accordance with the Removal Action Work Plan (Appendix A), the containment area was cleaned and decontaminated on January 12 and 13, 2011. All debris was removed, sediment on the concrete floor was scraped and removed and the concrete walls and floor of the containment area were pressure washed with a steam cleaner. The removed sediment was sampled and classified as non-hazardous by EEI.

Portions of the north end of the South Containment Area floor contain small trenches (approximately eight inches deep by four to eight inches in width). It appears that the trenches may have originally been present throughout the South Containment Area, but were historically

filled with concrete over the middle and south portions of the South Containment Area. The trenches in the north end of the containment area, which were thought to have concrete floors, were filled with sediment and black mud, interpreted as being predominantly derived from the decay of algae and other organic matter. Prior to beginning the decontamination operations, it was determined that the trenches did not have concrete floors, but instead all of the trenches that had not been filled with concrete had clay bottoms.

An air-mover and vacuum box were used to “vacuum” mud and sediment from the trenches to the depths at which clay was encountered, usually around the same level or slightly below the level of the base of the adjacent concrete. The concrete walls of the trenches were then pressure washed. After decontamination of the South Containment Area was complete two verification samples were collected from the clay floor of the trenches as discussed in Section 3.2. Based on a request by EPA, the trenches were subsequently backfilled with sandy clay soil imported from an off-site quarry.

Mud, sediment and water collected in the vacuum box used during decontamination of the South Containment Area were included under the aforementioned non-hazardous characterization for sediment from the floor of the containment area. The vacuum box, including collected mud, sediment and water, was removed from the Site on January 27, 2011 and temporarily stored at an EEI subcontractor’s equipment yard in Clute, Texas. It was transported to the Waste Management Coastal Plains Landfill for solidification and disposal as non-hazardous waste on February 24, 2011. Three additional roll-off boxes of non-hazardous debris and sediment scrapings from the South Containment Area, as well as other miscellaneous debris from the Site, were also transported to the Coastal Plains Landfill for disposal as non-hazardous wastes on January 27, 2011. Available manifests for non-hazardous wastes transportation and disposal are provided in Appendix D.

Pursuant to the Removal Action Work Plan provisions, the South Containment Area berm was breached to preclude future water accumulation. The berm was breached at the two lowest points of the containment area, the northwest corner and the northeast corner, on January 18, 2011 following the completion of all decontamination activities.

## **2.6.2 North Containment Area**

During the Removal Action it was discovered that the North Containment Area did not have a concrete floor as originally thought. The floor of the North Containment Area was instead constructed of 4 to 8-inches of caliche-like base material, underlain by clay. The base material in the floor of the containment area was visibly stained with hydrocarbons beneath four of the tanks. Surficial staining was present beneath the two large ASTs (Tanks Nos. 15 and 21). More extensive staining was evident beneath Tank No. 6, which, when removed, was found to have several holes in its base. Staining was also observed below the footprint of Tank No. 2, located adjacent to Tank No. 6; however, the staining is believed to be associated with releases from Tank No. 6.

As a measure to ensure future water accumulated in the North Containment Area would not become impacted by residual contaminants on the caliche floor of the containment area, the North Containment Area floor surface was scraped using a small front-end loader on January 7 and January 14, 2011. The removed surface material scrapings were stockpiled and later loaded into two roll-off boxes, sampled and characterized for disposal (soil scrapings were loaded and sampled on January 14, 2011). Based on the characterization sample results, the North Containment Area floor scrapings were classified as hazardous. The two roll-boxes containing these hazardous soils are scheduled to be shipped to the disposal facility during the week of March 21, 2011.

Based on the visible staining observed in localized areas of the North Containment Area floor, particularly below the Tank No. 6 footprint, a plan for excavation of visibly impacted soils below the former locations of Tank Nos. 2, 6, 15, and 21 was developed. On January 7, 2011 Eric Pastor of PBW sent an email to Gary Miller of EPA, outlining the proposed approach to address these areas. The planned approach was to excavate visibly impacted soils, sample and characterize excavated soils, and collect confirmation samples from the excavated areas. The approach included a contingency, that in the event that some areas could not be practically excavated to the point that visible staining was removed, or the extent of impacted soil was anticipated to preclude effective remediation by excavation, EPA would be contacted to discuss potential in-place management options. Pending EPA's concurrence, the approach would then be to excavate as much material as appropriate, and collect verification samples to document volatile organic compound (VOC) and semi-volatile organic compound (SVOC) concentrations in the

residual (i.e., post-excavation) soil. The e-mail outlining the approach, supporting documentation, and the EPA's email approving the approach are provided in Appendix G.

Excavation of the visibly impacted soils in the North Containment Area was performed on January 11, 12, and 13, 2011. Observations made during excavation of the Tank No. 6 area on January 11 and 12, confirmed that the contingency described above would need to be implemented. Visibly impacted soil in this area extended from the surface to approximately 5.5 feet below ground surface at specific locations beneath the former location (footprint) of Tank No. 6. Near the south end of the Tank No. 6 footprint, the impacted soil extended to the west beneath the south end of the former location of Tank No. 2 (approximately south one-fourth of Tank No. 2 footprint), where soil was excavated to approximately 2.5 feet bgs. Beneath the remainder of the Tank No. 2 footprint (north three-fourths of Tank No. 2 footprint) there were no visible impacts at a depth of approximately one foot bgs, and the excavation was terminated at that depth in that area.

During the excavation of the area beneath Tank Nos. 2 and 6, the subsurface material present from the ground surface to approximately 2 to 2.5 feet bgs was observed to consist of fill material (including caliche base material and clay as described above). Outside of the Tank Nos. 2 and 6 footprints, this fill material was not visibly impacted. Except for a thin (approximately 0.2 feet thick) zone of black staining along the contact between the base of the fill and original ground surface (approximately 2 feet bgs), there was no visible staining below 2.5 feet bgs south and west of Tank No. 2.

Approximately the southern two-thirds of the area beneath the Tank No. 6 footprint were excavated to a depth of approximately 5.5 to 6 feet bgs. In the south and east walls of the excavation visibly impacted soils were present from approximately 2.5 feet bgs to approximately 5.5 feet bgs. In this deepest portion of the excavation, a clay soil with no visible impacts was present from approximately 5.5 feet to 6 feet bgs. Beneath the northern end (approximately northern one-third) of the Tank No. 6 footprint, visibly impacted soil was excavated to approximately 2 feet bgs. At that depth visible impacts were limited to localized areas. The extent of the excavation below Tank Nos. 2 and 6 is shown on Figure 4. Verification sampling performed in this area is discussed in Section 3.0, below.

Very well compacted and hard caliche was encountered Beneath the Tank Nos. 15 and 21 footprints. These areas were scraped using a trackhoe to remove surficial staining. Approximately 3 to 4-inches of caliche were scraped from the footprint of both former tanks. Below both the Tank Nos. 15 and 21 footprints, the staining was observed to extend through the caliche base (6 to 8-inches) in localized areas, but did not appear to have visibly impacted the underlying clay. Visibly impacted caliche was removed to the extent practical. Verification sampling was performed beneath both Tanks Nos. 15 and 21 as discussed in Section 3.0.

All excavated soils from the Tank Nos. 2/6 excavation, and the scraped caliche/soil from the Tank Nos. 15 and 21 footprints were placed directly into six water-tight roll-off boxes and sampled for characterization on January 14, 2011. Based on the results of the characterization sampling, this excavated soil was classified as hazardous. Two of the roll-boxes containing excavated soil were removed from the Site for delivery to Clean Harbors for incineration on February 8, 2011. The remaining four roll-off boxes of hazardous soils, along with the two roll-offs containing the surface scrapings from the North Containment Area described above, are scheduled to be shipped to the disposal facility during the week of March 21, 2011. A summary of hazardous soil from the North Containment Area transported from the Site during the Removal Action is provided in Table 5, and copies of available wastes manifests for this material are provided in Appendix D.

After verification samples were collected from the excavated area, the excavation was backfilled with sandy clay soil imported from an off-site quarry and the entire North Containment Area was graded so that accumulated water would drain to the low side (east side of containment area).

Pursuant to the Removal Action Work Plan provisions, and following receipt and evaluation of analytical results from the accumulated water sample collected after completion of the Removal Action and Site restoration in the North Containment Area (sample collected on January 18, 2011), the North Containment Area berm was breached. The berm was breached at the lowest point of the containment area along the east side on January 27, 2011.

### 3.0 SAMPLING AND ANALYSIS

The following sections describe sampling and analysis performed during the Removal Action.

#### 3.1 ACCUMULATED WATER IN CONTAINMENT AREAS

As summarized in Section 2.1 samples of accumulated water were collected from the North and South Containment Areas during the Removal Action on December 30, 2011, and from the North Containment Area only, on January 18, 2011. These water samples were all analyzed for selected VOCs and the results compared to discharge criteria as identified in the TCEQ Surface Discharge Letter (Appendix C) and listed in Table 2. Field pH measurements collected at the time of sample collection are also included in Table 2.

All accumulated water samples were collected and handled in accordance with the procedures described in the Remedial Investigation/Feasibility Study (RI/FS) Field Sampling Plan (FSP) (PBW, 2006). The samples obtained on December 30, 2010, were collected from the North and South Containment Areas in locations where accumulated water was most likely to be impacted by Site activities performed prior to that date. The South Containment Area water sample was collected near the northwest corner of the containment area where pumps had been staged and pumping activities performed. The North Containment Area was sampled in two locations. Sample "N. Containment (NW)" was collected from water that had accumulated in the footprint of Tank No. 6, and sample "N. Containment (NE)" was collected from water that had accumulated in the footprint of Tank No. 21, both areas where the floor of the containment was observed to be visibly impacted when the tanks were moved. As discussed in Section 2.1 and shown on Table 2, the accumulated water in the South Containment Area met discharge criteria and was discharged to the Intracoastal Waterway. Neither of the two water samples collected from the North Containment Area met discharge criteria. Accumulated water from the North Containment Area was pumped into tanker trailers and transported to the Clean Harbors facility for disposal.

As mentioned above and discussed in Section 2.1, a subsequent accumulated water sample was collected from the North Containment Area on January 18, 2011. This sample was collected following a rainfall event that occurred after the excavated areas in the North Containment Area had been backfilled, and the entire containment area had been scraped and graded. The sample

was collected from water accumulated near the center of the North Containment Area. As previously stated in Section 2.1 analytical results for this sample met discharge criteria, and the accumulated water was released when the containment berm was breached on January 27, 2011.

Table 2 presents a comparison of accumulated water analytical results for both sampling events to discharge criteria. Field pH measurements collected at the time of sample collection or prior to surface water discharge are also provided on Table 2. Laboratory analytical reports and sample validation reports are included in Appendix H.

### **3.2 SOIL VERIFICATION SAMPLES**

In order to document soil conditions at the North Containment Area following completion of excavation activities, eight verification soil samples were collected from this area. These samples were collected after it was determined that impacted soil encountered at depths ranging from approximately 2.5 feet bgs to approximately 5.5 feet bgs could not be practically excavated such that visible staining was removed. The verification samples were intended to characterize VOC and SVOC concentrations in the residual (i.e., post-excavation) soil.

After excavation was terminated in the area beneath Tank Nos. 2 and 6 and the containment area base material floor had been scraped in the Tank Nos. 15 and 21 areas, soil samples were collected from these areas. These samples, which were collected and handled in accordance with FSP procedures, were collected on January 13, 2011. Sample locations, as shown on Figure 4, included:

- one sample from below the Tank No. 15 footprint at a depth of 0.8 feet bgs (T-15-F);
- one sample from below the Tank No. 21 footprint at a depth of 0.5 feet bgs (T-21-F);
- one sample of surface soil near the center of the North Containment Area at a depth of 0 to 0.3 feet bgs (NC-0-0.3);
- one sample from the west wall of the excavation beneath Tank Nos. 2 and 6, west of the former location of Tank No. 2 and near the southwest corner of the overall excavation at a depth of 2.5 feet bgs (T-2-West);

- one sample from the floor of the excavation beneath the footprint of Tank No. 6 approximately 10 feet north of the south end of the former tank location at a depth of 5.8 feet bgs (T-6-Floor);
- one sample from the east wall of the Tank No. 6 excavation approximately 11 feet north of the south end of excavation – this sample was collected in visibly impacted soil at a depth of 4 feet bgs, which is approximately 1.5 feet below the upper limit of visibly impacted soil (T-6-East);
- one sample from the south end of the Tank No. 6 excavation beneath the south end of the former Tank No. 6 footprint – this sample was collected in visibly impacted soil at a depth of 4.5 feet bgs, which is approximately 2 feet below the upper limit of visibly impacted soil (T-6-South); and
- one sample from the north wall of the Tank No. 6 excavation beneath the north end of the former Tank No. 6 footprint at a depth of approximately 2 feet bgs – no visible impacts were observed at this sample location (T-6-North).

Analytical results for the Site's chemicals of interest from the verification samples were evaluated relative to comparison values, which were established by using the lower of the EPA Region 6 Soil Screening Criteria value and the  $TCEQ^{Tot}Soil_{Comb}$  value for an industrial/commercial exposure scenario. The analytical results from the soil verification samples relative to comparison values are summarized in Table 6. Laboratory analytical reports and data validation reports are provided in Appendix H.

Analytical results for SVOCs did not exceed comparison criteria for any chemicals of interest, at any of the verification sample locations. However, VOC comparison criteria were exceeded at verification sample locations T-15-F (benzene, chloroform and trichloroethene (TCE)); T-21-F (tetrachloroethene (PCE) and TCE); NC-0-0.3 (TCE); T-6-East (benzene, ethylbenzene and isopropylbenzene); T-6-South (benzene, chloroform, and ethylbenzene); and T-6-North (benzene and TCE).

Verification samples were also collected from the clay floor of the trenches in the South Containment Area at two locations. The verification sample locations are shown on Figure 4 and described below:

- one sample of the clay from the floor of the trench near the northwest corner of the containment area - collected approximately 15 feet south of the north berm and 15 feet east of the west berm (SC-W); and
- one sample of the clay from the floor of the trench near the northeast corner of the containment area - collected approximately 15 feet south of the north berm and 19 feet west of the east berm (SC-E).

Analytical results from samples collected in the South Containment trenches (summarized in Table 6) did not exceed comparison criteria for VOCs or SVOCs for any chemicals of interest.

Several exceedences of the comparison criteria listed in Table 6 were noted on an individual sample basis for some of the North Containment Area soil samples. These concentrations resulted in predicted risks that were within EPA's acceptable or target risk range for carcinogens ( $10^{-4}$  to  $10^{-6}$  risk) and below a target hazard quotient of one for non-carcinogens based on an industrial/commercial exposure scenario.

#### **4.0 CONCLUSIONS**

The purpose of the Removal Action at the Gulfco AST Tank farm was to remove and properly dispose of contents of the ASTs; remove, demolish and dispose of the tanks in the AST Tank Farm; and decontaminate the AST Tank Farm containment areas. The overarching Removal Action objectives as set forth in Paragraph 31.f of the Settlement Agreement are to protect the public health, welfare, or the environment. These objectives have been met through performance of the Removal Action activities documented in this report.

## **5.0 REFERENCES**

Pastor, Behling & Wheeler, LLC (PBW), 2006. Sampling and Analysis Plan – Volume I, Field Sampling Plan, Gulfco Marine Maintenance Site, Freeport, Texas. May 16.

Pastor, Behling & Wheeler, LLC (PBW), 2010. Final Baseline Human Health Risk Assessment, Gulfco Marine Maintenance Site, Freeport, Texas. March 31.

United States Environment Protection Agency (EPA), Region 6, 2010. Administrative Settlement Agreement and Order on Consent for Removal Action (Settlement Agreement). October.

## **TABLES**

**TABLE 1 - TANK CONTENT SUMMARY**

<b>Tank No.</b>	<b>Content Description</b>
Tank No. 2	Organic/Aqueous Mixture Solids - sand, debris
Tank No. 4	Oily Water
Tank No. 6	Rust Solids and Organic Liquids
Tank No. 10	Empty
Tank No. 13	Oily Sludge
Tank No. 14	Small Amount of Oil Solids
Tank No. 15	Oily Sludge and Water
Tank No. 16	Oily Sludge
Tank No. 17	Empty
Tank No. 18	Light Organic Phase
Tank No. 19	Oily Sludge
Tank No. 21	Oily Water and Oily Sludge
Tank No. 22	Oily sludge
Tank No. 23	Weathered Diesel

**TABLE 2 - CONTAINMENT AREA ACCUMULATED WATER ANALYTICAL DATA RELATIVE TO DISCHARGE CRITERIA**

<u>Parameter</u>	<u>December 30, 2010 Accumulated Water Sample</u>			<u>January 18, 2011 Accumulated Water Sample</u>	<u>Water-Quality Based Effluent Limitations<sup>1</sup></u>		<u>Technology-Based Effluent Limitations<sup>2</sup></u>	
	North Containment (NE)	North Containment (NW)	South Containment	North Containment	<u>Daily Average</u>	<u>Daily Maximum</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
Benzene	0.137J mg/L	2.0 mg/L	0.00566 mg/L	<0.000054 mg/L	2.4 mg/L	5.1 mg/L	0.057 mg/L	0.134 mg/L
Chloroform	8.66 mg/L	5.29 mg/L	0.005J mg/L	<0.000057 mg/L	29.4 mg/L	62.2 mg/L	0.111 mg/L	0.325 mg/L
1,2-dichloroethane	0.580 mg/L	7.29 mg/L	<0.000086 mg/L	<0.000086 mg/L	1.6 mg/L	3.5 mg/L	0.18 mg/L	0.574 mg/L
Trichloroethylene	<0.00618 mg/L	1.93 mg/L	0.0111 mg/L	<0.000062 mg/L	13.9 mg/L	29.5 mg/L	0.026 mg/L	0.069 mg/L
Tetrachloroethylene	0.225J mg/L	0.252 mg/L	0.0107 mg/L	<0.000121 mg/L	7.3 mg/L	15.5 mg/L	0.052 mg/L	0.164 mg/L
Vinyl Chloride	<0.0093 mg/L	<0.00465 mg/L	<0.000093 mg/L	<0.000093 mg/L	9.5 mg/L	20.0 mg/L	0.097 mg/L	0.172 mg/L
pH (Standard Units)	6.28	6.13	6.2	6.44	(Minimum 6.0)	(Maximum 9.0)	(Minimum 6.0)	(Maximum 9.0)

Notes:

<sup>1</sup>From Attachment 1 of June 22, 2010 TCEQ Memorandum.

<sup>2</sup>From Attachment 2 of June 22, 2010 TCEQ Memorandum.

<sup>3</sup> Data Qualifier: J = Estimated concentration.

**TABLE 3 - LIQUID WASTES DISPOSAL SUMMARY**

Shipment Date	Waste Description	Tanker No.	Manifest No.	Estimated Gallons	Weight (lbs)	Waste Disposition <sup>(1)</sup>
<b>Aqueous - Hazardous Liquids</b>						
11/17/10	Aqueous-Haz	T-346	000115092	4,800	40,260	Clean Harbors
11/18/10	Aqueous-Haz	T-332	000115093	4,800	41,600	Clean Harbors
11/18/10	Aqueous-Haz	T-514	000115094	5,000	43,440	Clean Harbors
11/19/10	Aqueous-Haz	T-351	000115095	5,000	39,860	Clean Harbors
11/19/10	Aqueous-Haz	T-332	000115097	5,000	41,800	Clean Harbors
11/22/10	Aqueous-Haz	T-346	000115098	5,000	44,940	Clean Harbors
11/23/10	Aqueous-Haz	T-321	000115100	5,000	42,880	Clean Harbors
11/23/10	Aqueous-Haz	T-687	000115099	5,000	43,440	Clean Harbors
11/30/10	Load Rejected	T-687	rejected <sup>(2)</sup>			Clean Harbors
12/1/10	Aqueous-Haz	T-321	000115079	5,000	44,460	Clean Harbors
12/1/10	Aqueous-Haz	T-351	000115101	5,000	42,360	Clean Harbors
12/2/10	Aqueous-Haz	T-332	000115103	5,000	41,660	Clean Harbors
12/2/10	Load Rejected	T-514	rejected			Clean Harbors
12/3/10	Load Rejected	T-687	rejected			Clean Harbors
12/7/10	Aqueous-Haz	T-514	000115084	5,000	43,800	Clean Harbors
12/15/10	Aqueous-Haz	T-687	000115087	4,500	39,400	Clean Harbors
1/6/11	Aqueous-Haz	T-687	000107697	5,000	32,286	Clean Harbors
1/27/11	Aqueous-Haz <sup>(3)</sup>	T-687	001370022	5,000	29,846	Clean Harbors
<b>Subtotal Aqueous-Haz</b>				<b>74,100</b>	<b>612,032</b>	
<b>Aqueous Non-Hazardous Liquids</b>						
11/17/10	Aqueous Non-Haz	T-514	WMI733174	2,300	21,760	Waste Management
<b>Subtotal Aqueous-Non-Haz</b>				<b>2,300</b>	<b>21,760</b>	
<b>Organics for Fuel Blending</b>						
11/29/10	Fuel Blending	T-332	000115083	4,000	31,160	Clean Harbors
11/29/10	Fuel Blending	T-514	000115076	5,000	44,280	Clean Harbors
11/30/10	Fuel Blending	T-346	000115077	5,000	42,380	Clean Harbors
<b>Subtotal Non-Aqueous (Fuel Blending)</b>				<b>14,000</b>	<b>117,820</b>	
<b>Total Liquids</b>				<b>90,400</b>	<b>751,612</b>	

Notes:

(1) Clean Harbors - Deer Park, Texas for Incineration; Waste Management - Coastal Plain Landfill - Alvin, Texas

(2) rejected - Load was rejected by Clean Harbors due to viscosity and returned to the Site for liquid/solids separation.

(3) Tanker T-687 load shipped on 1/27/11 contained accumulated water from North Containment Area

**TABLE 4 - SOLID WASTES DISPOSAL SUMMARY**

Shipment Date	Waste Description	Tanker/Box No.	Manifest No.	Weight (lbs)	Waste Disposition <sup>(1)</sup>
12/14/2010	Haz-Solids	2237	000115120	39,296	Clean Harbors
12/14/2010	Haz-Solids	N23486	000115119	30,836	Clean Harbors
12/15/2010	Haz-Solids	RBR250515	000115066	24,896	Clean Harbors
12/15/2010	Haz-Solids	RBR250445	000115067	23,976	Clean Harbors
12/16/2010	Haz-Solids	RB26606	000115068	33,176	Clean Harbors
12/16/2010	Haz-Solids	N16822	000115069	20,316	Clean Harbors
12/17/2010	Haz-Solids	N26538	000115070	32,056	Clean Harbors
12/17/2010	Haz-Solids	N48861	000115071	29,756	Clean Harbors
12/17/2010	Haz-Solids	N41024	000115075	31,116	Clean Harbors
12/17/2010	Haz-Solids	2536RB	000115085	23,176	Clean Harbors
12/20/2010	Haz-Solids	RB26712	000107504	27,496	Clean Harbors
12/20/2010	Haz-Solids	RB2609	000107505	21,576	Clean Harbors
12/21/2010	Haz-Solids	N35202	000107506	26,876	Clean Harbors
12/21/2010	Haz-Solids	N48754	000107512	19,216	Clean Harbors
12/22/2010	Haz-Solids	N12736	rejected <sup>(2)</sup>		Clean Harbors
12/22/2010	Haz-Solids	N44607	000107507	32,496	Clean Harbors
12/27/2010	Haz-Solids	RBR250185	000107508	19,476	Clean Harbors
12/27/2010	Haz-Solids	N23486	000107509	30,116	Clean Harbors
12/28/2010	Haz-Solids	RB26833	rejected		Clean Harbors
12/28/2010	Haz-Solids	N16822	rejected		Clean Harbors
12/29/2010	Haz-Solids	N12736	rejected		Clean Harbors
12/29/2010	Haz-Solids	48861	000107564	32,006	Clean Harbors
12/29/2010	Haz-Solids	RB2609	rejected		Clean Harbors
12/30/2010	Haz-Solids	N48754	000107569	33,606	Clean Harbors
12/30/2010	Haz-Solids	2237	000107566	31,326	Clean Harbors
1/3/2011	Haz-Solids	RBR250445	000107568	33,866	Clean Harbors
1/4/2011	Haz-Solids	N16822	000107567	29,546	Clean Harbors
1/4/2011	Haz-Solids	RB26833	000107652	28,766	Clean Harbors
1/5/2011	Haz-Solids	RB2609	000107653	34,426	Clean Harbors
1/5/2011	Haz-Solids	N12736	000107656	38,526	Clean Harbors
1/6/2011	Haz-Solids	RB26606	000107654	41,486	Clean Harbors
2/8/2011	Haz-Solids	N35202	000107657	43,246	Clean Harbors
<b>Haz-Solids Subtotal</b>				<b>812,652</b>	
1/27/2011	Non-Haz-Solids	40001	001370018	24,906	Waste Management
1/27/2011	Non-Haz-Solids	B20-571	001370021	6,026	Waste Management
1/27/2011	Non-Haz-Solids	2536RB	001370019	17,686	Waste Management
2/23/2011	Non-Haz-Solids	Vac Box	001370171	15,666	Waste Management
<b>Non-Haz-Solids Subtotal</b>				<b>64,284</b>	
<b>Total Solids</b>				<b>876,936</b>	

Notes:

(1) Clean Harbors - Deer Park, Texas for Incineration; Waste Management - Coastal Plains Landfill - Alvin, Texas

(2) rejected - Load was rejected by Clean Harbors due to free liquids and returned to the Site for additional solidification and reshipment.

**TABLE 5 - NORTH CONTAINMENT AREA SOILS DISPOSAL SUMMARY**

<b>Shipment Date</b>	<b>Waste Description</b>	<b>Box No.</b>	<b>Manifest No.</b>	<b>Weight (lbs)</b>	<b>Waste Disposition<sup>(1)</sup></b>
2/9/2011	Haz-Soils	RB26712	000107661	40,266	Clean Harbors
2/9/2011	Haz-Soils	RBR250185	000107658	39,286	Clean Harbors
3/14/2011	Haz-Soils	N26603	001445391	33,066	Clean Harbors
3/14/2011	Haz-Soils	2535RB	001445390	31,466	Clean Harbors
3/22/2011	Haz-Soils	2592	001445395	35,666	Clean Harbors
3/22/2011	Haz-Soils	N26538	001445394	37,146	Clean Harbors
3/25/2011	Haz-Soils	RB250070	001445393	29,546	Clean Harbors
3/25/2011	Haz-Soils	2498RB	001445392	25,766	Clean Harbors
Total Haz-Soils				<b>272,208</b>	

Notes:

(1) Clean Harbors - Deer Park, Texas for Incineration

TABLE 6 - SOIL ANALYTICAL DATA RELATIVE TO COMPARISON CRITERIA<sup>(1)</sup>

Chemicals of Interest	Comparison Criteria <sup>(2)</sup>	SAMPLE DESIGNATION <sup>(3)</sup>									
		T-15-F	T-21-F	NC-0-0.3	T-2-WEST	T-6-FLOOR	T-6-EAST	T-6-SOUTH	T-6-NORTH	SC-W	SC-E
<b>VOCs</b>											
1,1,1,2-Tetrachloroethane	7.60	<0.00507	<0.00542	<0.00672	<0.026	<0.015	<1.39	<1.36	<0.00577	<0.00586	<0.00722
1,1,1-Trichloroethane	1400.00	<0.011	<0.012	0.213J	<0.058	<0.033	<3.06	<2.99	0.087J	<0.013	<0.016
1,1,2,2-Tetrachloroethane	0.97	<0.013	<0.014	<0.018	<0.069	<0.039	<3.66	<3.57	<0.015	<0.015	<0.019
1,1,2-Trichloroethane	2.10	<0.011	<0.012	<0.015	<0.059	<0.033	<3.12	<3.04	<0.013	<0.013	<0.016
1,1-Dichloroethane	2300.00	<0.016	<0.017	<0.021	<0.084	<0.047	<4.40	<4.30	<0.018	<0.019	<0.023
1,1-Dichloroethene	470.00	<0.032	<0.034	<0.043	<0.168	<0.095	<8.84	<8.63	<0.037	<0.037	<0.046
1,1-Dichloropropene	60.91	<0.010	<0.011	<0.013	<0.052	<0.029	<2.76	<2.69	<0.011	<0.012	<0.014
1,2,3-Trichloropropane	0.0034	<0.017	<0.018	<0.022	<0.087	<0.049	<4.60	<4.49	<0.019	<0.019	<0.024
1,2,4-Trichlorobenzene	260.00	<0.015	<0.016	<0.020	<0.077	<0.043	<4.04	<3.95	<0.017	<0.017	<0.021
1,2,4-Trimethylbenzene	190.00	<0.014	0.59J	0.123J	<0.075	<0.042	<3.95	<3.86	0.230J	0.111J	0.074J
1,2-Dibromo-3-chloropropane	2.20	<0.039	<0.041	<0.051	<0.202	<0.114	<10.6	<10.4	<0.044	<0.045	<0.055
1,2-Dibromoethane	0.07	<0.012	<0.012	<0.015	<0.060	<0.034	<3.17	<3.09	<0.013	<0.013	<0.016
1,2-Dichlorobenzene	370.00	<0.016	<0.017	<0.021	<0.082	<0.046	<4.31	<4.21	<0.018	<0.018	<0.022
1,2-Dichloroethane	0.84	<0.00633	<0.00676	0.603	<0.033	<0.019	<1.74	<1.70	<0.00720	<0.00731	<0.00901
1,2-Dichloropropane	0.85	<0.00522	<0.00558	<0.00691	<0.027	<0.015	<1.43	<1.40	<0.00593	<0.00603	<0.00743
1,3,5-Trimethylbenzene	78.00	<0.012	<0.012	0.110J	<0.061	<0.034	<3.20	<3.12	0.094J	0.057J	<0.017
1,3-Dichlorobenzene	88.17	<0.015	<0.016	<0.020	<0.080	<0.045	<4.23	<4.13	<0.018	<0.018	<0.022
1,3-Dichloropropane	60.91	<0.00865	<0.00924	<0.011	<0.045	<0.025	<2.37	<2.32	<0.00983	<0.00999	<0.012
1,4-Dichlorobenzene	8.10	<0.020	<0.021	<0.026	<0.103	<0.058	<5.45	<5.32	<0.023	<0.023	<0.028
2,2-Dichloropropane	44.19	<0.056	<0.060	<0.074	<0.292	<0.164	<15.4	<15.0	<0.064	<0.065	<0.080
2-Butanone	34000.00	<0.029	<0.031	<0.039	<0.152	<0.085	<7.99	<7.80	<0.033	<0.034	<0.041
2-Chloroethylvinyl ether	3.31	<0.011	<0.012	<0.015	<0.059	<0.033	<3.10	<3.03	<0.013	<0.013	<0.016
2-Chlorotoluene	510.00	<0.013	<0.014	<0.017	<0.066	<0.037	<3.50	<3.42	<0.015	<0.015	<0.018
2-Hexanone	79.20	<0.016	<0.018	<0.022	<0.085	<0.048	<4.49	<4.39	<0.019	<0.019	<0.023
4-Chlorotoluene	3.46	<0.015	<0.016	<0.020	<0.077	<0.043	<4.06	<3.96	<0.017	<0.017	<0.021
4-Isopropyltoluene	4713.42	<0.013	<0.014	<0.017	<0.067	<0.038	<3.53	<3.44	<0.015	<0.015	<0.018
4-Methyl-2-pentanone	17000.00	<0.016	<0.018	<0.022	<0.086	<0.048	<4.52	<4.41	<0.019	<0.019	<0.023
Acetone	8114.02	<0.051	<0.055	<0.068	<0.267	<0.150	<14.1	<13.7	<0.058	<0.059	<0.073
Acrolein	0.38	<0.097	<0.103	<0.128	<0.504	<0.283	<26.5	<25.9	<0.110	<0.112	<0.138
Acrylonitrile	0.55	<0.052	<0.055	<0.069	<0.269	<0.152	<14.2	<13.8	<0.059	<0.060	<0.074
Benzene	1.60	<0.00662	<0.00707	0.217J	<0.034	1.33	<b>18.2J</b>	<b>13.8J</b>	<b>2.94</b>	0.102J	<0.00942
Bromobenzene	120.00	<0.015	<0.016	<0.019	<0.076	<0.043	<3.99	<3.90	<0.017	<0.017	<0.021
Bromodichloromethane	2.60	<0.00724	<0.00775	<0.00960	<0.038	<0.021	<1.99	<1.94	<0.00824	<0.00838	<0.010
Bromoform	240.00	<0.011	<0.012	<0.015	<0.058	<0.033	<3.06	<2.99	<0.013	<0.013	<0.016
Bromomethane	15.00	<0.071	<0.075	<0.093	<0.368	<0.207	<19.4	<18.9	<0.080	<0.082	<0.100
Butanol	3075.73	<0.884	<0.945	<1.17	<4.61	<2.59	<243	<237	<1.01	<1.02	<1.26
Carbon disulfide	720.00	<0.022	<0.024	<0.030	<0.117	<0.066	<6.17	<6.02	<0.026	<0.026	<0.032
Carbon tetrachloride	0.58	<0.011	<0.012	<0.015	<0.059	<0.033	<3.13	<3.05	<0.013	<0.013	<0.016
Chlorobenzene	600.00	<0.00908	<0.00971	<0.012	<0.047	<0.027	<2.49	<2.43	<0.010	<0.010	<0.013
Chloroethane	7.20	<0.032	<0.034	<0.042	<0.166	<0.093	<8.74	<8.53	<0.036	<0.037	<0.045
Chloroform	0.58	<b>0.638</b>	0.286	0.545	<0.062	<0.035	<3.26	<b>18.4J</b>	0.293	<0.014	<0.017
Chloromethane	3.00	<0.037	<0.039	<0.048	<0.191	<0.107	<10.0	<9.80	<0.042	<0.042	<0.052
cis-1,2-Dichloroethene	160.00	0.198J	0.250J	<0.011	<0.043	<0.024	<2.28	<2.23	<0.00945	<0.00960	0.012
cis-1,3-Dichloropropene	42.94	<0.00700	<0.00749	<0.00928	<0.037	<0.021	<1.92	<1.88	<0.00796	<0.00810	<0.00997
Cyclohexane	6800.00	<0.00850	0.108J	0.183J	<0.044	<0.025	<2.33	<2.28	0.063J	0.208J	0.106J
Dibromochloromethane	2.60	<0.00676	<0.00723	<0.00896	<0.035	<0.020	<1.86	<1.81	<0.00769	<0.00782	<0.00963
Dibromomethane	194.29	<0.015	<0.016	<0.020	<0.079	<0.044	<4.16	<4.06	<0.017	<0.018	<0.022
Dichlorodifluoromethane	340.00	<0.00536	<0.00573	<0.00711	<0.028	<0.016	<1.47	<1.44	<0.00610	<0.00620	<0.00763
Ethylbenzene	230.00	<0.00995	<0.011	0.818	<0.052	9.44	<b>272</b>	<b>321</b>	1.83	0.144J	0.195J
Hexachlorobutadiene	22.80	<0.011	0.179J	<0.015	<0.059	<0.033	<3.09	<3.02	<0.013	<0.013	<0.016
Isopropylbenzene (Cumene)	580.00	<0.00942	0.236J	0.942J	32.6J	12.6J	<b>1660J</b>	543J	0.221J	0.328J	0.427J
Methyl acetate	6589.22	<0.017	<0.018	1.03	<0.086	<0.048	<4.53	<4.43	<0.019	<0.019	<0.024
Methyl iodide	121.39	<0.063	<0.068	<0.084	<0.330	<0.186	<17.4	<17.0	<0.072	<0.073	<0.090
Methylcyclohexane	140.00	<0.00792	<0.00847	<0.010	<0.041	<0.023	<2.17	<2.12	<0.00901	<0.00916	<0.011
Methylene chloride	22.00	<0.017	<0.018	0.062J	<0.088	<0.049	<4.61	<4.50	<0.019	<0.019	<0.024
Naphthalene	189.76	<0.040	0.101J	0.49	<0.208	<0.117	<10.9	16.4J	0.427	0.118J	0.164J
n-Butylbenzene	240.00	<0.017	<0.018	<0.022	<0.088	<0.049	<4.63	<4.52	<0.019	<0.019	<0.024
n-Propylbenzene	240.00	<0.013	<0.014	<0.017	<0.068	<0.038	<3.59	<3.51	0.155J	<0.015	<0.019
o-Xylene	280.00	<0.00913	<0.00976	0.176J	<0.048	1.95	167	68.6	0.357	0.109J	0.087J
sec-Butylbenzene	220.00	<0.012	<0.013	<0.016	<0.063	<0.036	<3.33	<3.25	<0.014	<0.014	<0.017
Styrene	1700.00	<0.013	<0.014	<0.017	<0.066	<0.037	21.8J	15.2J	<0.015	<0.015	<0.018

TABLE 6 - SOIL ANALYTICAL DATA RELATIVE TO COMPARISON CRITERIA<sup>(1)</sup>

Chemicals of Interest	Comparison Criteria <sup>(2)</sup>	SAMPLE DESIGNATION <sup>(3)</sup>									
		T-15-F	T-21-F	NC-0-0.3	T-2-WEST	T-6-FLOOR	T-6-EAST	T-6-SOUTH	T-6-NORTH	SC-W	SC-E
tert-Butyl methyl ether (MTBE)	41.00	<0.00807	<0.00862	<0.011	<0.042	0.234J	<2.21	<2.16	0.479	<0.00932	<0.011
tert-Butylbenzene	390.00	<0.011	<0.012	<0.015	<0.060	<0.034	<3.14	<3.07	<0.013	<0.013	<0.016
Tetrachloroethene	1.70	<0.0100	<b>2.5</b>	0.835	<0.052	<0.029	<2.74	<2.68	<0.011	<0.012	<0.014
Toluene	520.00	<0.00966	<0.010	0.227J	<0.050	1	37.0J	23.8J	0.271J	<0.011	<0.014
trans-1,2-Dichloroethene	240.00	<0.00976	<0.010	<0.013	<0.051	<0.029	<2.68	<2.61	<0.011	<0.011	<0.014
trans-1,3-Dichloropropene	60.91	<0.011	<0.011	<0.014	<0.055	<0.031	<2.92	<2.85	<0.012	<0.012	<0.015
trans-1,4-Dichloro-2-butene	0.29	<0.027	<0.029	<0.036	<0.143	<0.080	<7.53	<7.35	<0.031	<0.032	<0.039
Trichloroethene	0.10	<b>0.112J</b>	<b>0.118J</b>	<b>1.02</b>	<0.059	<0.033	<3.10	<3.03	<b>0.174J</b>	<0.013	<0.016
Trichlorofluoromethane	1400.00	<0.00647	<0.00692	<0.00858	<0.034	<0.019	<1.78	<1.73	<0.00736	<0.00748	<0.00922
Trichlorotrifluoroethane	5600.00	<0.056	<0.059	<0.074	<0.290	<0.163	<15.2	<14.9	<0.063	<0.064	<0.079
Vinyl acetate	1600.00	<0.011	<0.011	<0.014	<0.056	<0.031	<2.94	<2.87	<0.012	<0.012	<0.015
Vinyl chloride	0.43	<0.00652	<0.00697	<0.00864	<0.034	<0.019	<1.79	<1.75	<0.00742	<0.00754	<0.00928
Xylene (total)	210.00	<0.033	<0.035	0.298J	<0.173	1.95	167	68.6J	1.02	0.226J	0.187J
<b>SVOCs</b>											
1,2-Diphenylhydrazine/Azobenzen	2.40	<0.00894	<0.00901	<0.00900	<0.00939	<0.010	<0.010	<0.010	<0.00962	<0.00981	<0.010
2,4,5-Trichlorophenol	12499.12	<0.047	<0.047	<0.047	<0.049	<0.053	<0.054	<0.053	<0.050	<0.051	<0.053
2,4,6-Trichlorophenol	170.00	<0.062	<0.062	<0.062	<0.065	<0.070	<0.070	<0.069	<0.066	<0.068	<0.070
2,4-Dichlorophenol	1683.88	<0.063	<0.064	<0.064	<0.066	<0.072	<0.072	<0.071	<0.068	<0.069	<0.072
2,4-Dimethylphenol	2867.85	<0.050	<0.050	<0.050	<0.053	<0.057	<0.057	<0.056	<0.054	<0.055	<0.057
2,4-Dinitrophenol	1362.67	<0.211	<0.212	<0.212	<0.221	<0.238	<0.241	<0.236	<0.227	<0.231	<0.238
2,4-Dinitrotoluene	20.62	<0.055	<0.056	<0.056	<0.058	<0.063	<0.063	<0.062	<0.060	<0.061	<0.063
2,6-Dinitrotoluene	28.05	<0.023	<0.023	<0.023	<0.024	<0.026	<0.027	<0.026	<0.025	<0.025	<0.026
2-Chloronaphthalene	26000.00	<0.021	<0.021	<0.021	<0.022	<0.024	<0.024	<0.024	<0.023	<0.023	<0.024
2-Chlorophenol	260.00	<0.030	<0.030	<0.030	<0.032	<0.034	<0.035	<0.034	<0.033	<0.033	<0.034
2-Methylnaphthalene	2477.58	<0.021	0.128J	0.145J	<0.022	<0.024	1.29J	0.55J	<0.023	<0.023	0.073J
2-Nitroaniline	2000.00	<0.044	<0.045	<0.044	<0.046	<0.050	<0.050	<0.050	<0.048	<0.048	<0.050
2-Nitrophenol	405.55	<0.018	<0.018	<0.018	<0.019	<0.020	<0.021	<0.020	<0.019	<0.020	<0.020
3,3'-Dichlorobenzidine	4.30	<0.251	<0.253	<0.253	<0.264	<0.284	<0.287	<0.282	<0.270	<0.276	<0.284
3-Nitroaniline	155.19	<0.048	<0.048	<0.048	<0.050	<0.054	<0.055	<0.054	<0.052	<0.053	<0.054
4,6-Dinitro-2-methylphenol	0.00	<0.039	<0.039	<0.039	<0.041	<0.044	<0.044	<0.043	<0.042	<0.042	<0.044
4-Bromophenyl phenyl ether	1.10	<0.035	<0.035	<0.035	<0.036	<0.039	<0.040	<0.039	<0.037	<0.038	<0.039
4-Chloro-3-methylphenol	2992.21	<0.031	<0.031	<0.031	<0.033	<0.035	<0.035	<0.035	<0.033	<0.034	<0.035
4-Chloroaniline	2700.00	<0.039	<0.039	<0.039	<0.041	<0.044	<0.045	<0.044	<0.042	<0.043	<0.044
4-Chlorophenyl phenyl ether	0.80	<0.044	<0.044	<0.044	<0.046	<0.049	<0.050	<0.049	<0.047	<0.048	<0.049
4-Nitroaniline	0.00	<0.073	<0.074	<0.074	<0.077	<0.083	<0.084	<0.082	<0.079	<0.080	<0.083
4-Nitrophenol	107.23	<0.136	<0.137	<0.137	<0.143	<0.154	<0.155	<0.152	<0.146	<0.149	<0.154
Acenaphthene	33000.00	<0.022	0.142	0.069J	<0.023	<0.025	0.233	0.084J	<0.024	<0.024	<0.025
Acenaphthylene	37163.64	<0.013	0.45J	0.058J	<0.014	<0.015	0.574J	0.037J	0.040J	0.045J	<0.015
Acetophenone	1700.00	<0.024	<0.025	0.068J	<0.026	0.046J	0.951	0.487	<0.026	<0.027	<0.028
Aniline	92.50	<0.021	<0.021	<0.021	<0.022	<0.024	<0.024	<0.024	<0.023	<0.023	<0.024
Anthracene	100000.00	<0.014	0.257	0.113	<0.015	<0.016	0.072J	<0.015	<0.015	0.053J	0.025J
Atrazine (Aatrex)	8.60	<0.058	<0.059	<0.058	<0.061	<0.066	<0.066	<0.065	<0.063	<0.064	<0.066
Benzaldehyde	344.36	<0.035R	<0.036R	<0.035R	<0.037R	<0.040R	<0.040R	<0.040R	<0.038R	<0.039R	<0.040R
Benzidine	0.01	<1.96	<1.96	<1.98	<2.06	<2.22	<2.24	<2.20	<2.11	<2.16	<2.22
Benzo(a)anthracene	2.30	<0.017	0.275	0.217	<0.018	<0.019	<0.019	<0.019	<0.018	0.094	0.060J
Benzo(a)pyrene	0.23	<0.023	0.188	0.162	<0.024	<0.026	<0.026	<0.025	<0.024	0.103	0.062J
Benzo(b)fluoranthene	2.30	<0.012	0.295J	0.346J	<0.013	<0.014	<0.014	<0.014	<0.013	0.293J	0.244J
Benzo(g,h,i)perylene	18581.82	<0.011	0.236J	0.286J	<0.011	<0.012	<0.012	<0.012	0.181J	0.328J	0.228J
Benzo(k)fluoranthene	23.00	<0.018	0.079J	0.074J	<0.019	<0.020	<0.021	<0.020	<0.019	0.065J	0.038J
Benzoic acid	496.39	<0.136	<0.137	<0.137	<0.143	<0.154	<0.155	<0.152	<0.146	<0.149	<0.154
Benzyl alcohol	6245.03	<0.046	<0.046	<0.046	<0.048	<0.052	<0.052	<0.051	<0.049	<0.050	<0.052
Biphenyl	193.66	<0.013	0.062J	0.058J	0.029J	<0.015	0.435J	0.180J	<0.014	<0.014	<0.015
Bis(2-Chloroethoxy)methane	6.25	<0.022	<0.022	<0.022	<0.023	<0.025	<0.025	<0.024	<0.023	<0.024	<0.025
Bis(2-Chloroethyl)ether	0.62	<0.030	<0.030	<0.030	<0.031	<0.034	<0.034	<0.033	<0.032	<0.033	<0.034
Bis(2-Chloroisopropyl)ether	107.99	<0.020	<0.020	<0.020	<0.021	<0.023	<0.023	<0.023	<0.022	<0.022	<0.023
Bis(2-Ethylhexyl)phthalate	140.00	<0.015	0.275	0.501	0.112	<0.017	<0.017	<0.017	0.115	0.154	0.123
Butyl benzyl phthalate	240.00	<0.00828	<0.00835	<0.00834	<0.00871	<0.00938	<0.00947	<0.00930	<0.00892	<0.00909	<0.00938
Caprolactam	234.60	<0.042	27.5	<0.042	<0.044	<0.047	<0.048	<0.047	<0.045	<0.046	<0.047
Carbazole	96.00	<0.028	<0.028	<0.028	<0.030	<0.032	<0.032	<0.032	<0.030	<0.031	<0.032
Chrysene	230.00	<0.013	0.377J	0.215J	<0.014	<0.015	<0.015	<0.015	0.023J	0.133J	0.081J
Dibenz(a,h)anthracene	0.23	<0.011	<0.011	<0.011	<0.011	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Dibenzofuran	1700.00	<0.014	<0.014	<0.014	<0.014	<0.015	<0.016	<0.015	<0.015	<0.015	<0.015

**TABLE 6 - SOIL ANALYTICAL DATA RELATIVE TO COMPARISON CRITERIA<sup>(1)</sup>**

Chemicals of Interest	Comparison Criteria <sup>(2)</sup>	SAMPLE DESIGNATION <sup>(3)</sup>									
		T-15-F	T-21-F	NC-0-0.3	T-2-WEST	T-6-FLOOR	T-6-EAST	T-6-SOUTH	T-6-NORTH	SC-W	SC-E
Diethyl phthalate	2041.30	<0.036	<0.037	<0.037	<0.038	<0.041	<0.041	<0.041	0.044J	0.045J	<0.041
Dimethyl phthalate	932.98	<0.00870	<0.00877	<0.00876	<0.00914	<0.00985	<0.00994	<0.00976	<0.00937	<0.00955	<0.00985
Di-n-butyl phthalate	16229.73	<0.00948	<0.00956	<0.00955	0.015J	0.013J	<0.011	0.017J	<0.010	<0.010	<0.011
Di-n-octyl phthalate	27000.00	<0.013	<0.013	<0.013	<0.014	<0.015	<0.015	<0.014	<0.014	<0.014	<0.015
Fluoranthene	24000.00	0.017J	0.352J	0.42	<0.00913	<0.00984	0.040J	0.048J	0.015J	0.178J	0.111J
Fluorene	24775.76	<0.012	0.16	0.115	0.020J	<0.014	0.268	0.106	<0.013	<0.013	0.018J
Hexachlorobenzene	1.20	<0.047	<0.047	<0.047	<0.049	<0.053	<0.054	<0.053	<0.051	<0.052	<0.053
Hexachlorocyclopentadiene	10.18	<0.059	<0.059	<0.059	<0.062	<0.066	<0.067	<0.066	<0.063	<0.064	<0.066
Hexachloroethane	140.00	<0.058	<0.059	<0.059	<0.061	<0.066	<0.067	<0.065	<0.063	<0.064	<0.066
Indeno(1,2,3-cd)pyrene	2.30	<0.016	0.257J	0.312J	<0.017	<0.018	<0.018	<0.018	<0.017	0.333J	0.259J
Isophorone	1903.23	<0.013	<0.013	<0.013	<0.014	<0.015	<0.015	<0.014	<0.014	<0.014	<0.015
Nitrobenzene	110.00	<0.018	<0.018	<0.018	<0.019	<0.021	<0.021	<0.020	<0.020	<0.020	<0.021
n-Nitrosodimethylamine	0.04	<0.020	<0.020	<0.020	<0.021	<0.023	<0.023	<0.022	<0.021	<0.022	<0.022
n-Nitrosodi-n-propylamine	0.27	<0.020	<0.020	<0.020	<0.021	<0.023	<0.023	<0.023	<0.022	<0.022	<0.023
n-Nitrosodiphenylamine	390.00	<0.012	<0.013	<0.013	<0.013	<0.014	<0.014	<0.014	<0.013	<0.014	<0.014
o-Cresol	1922.57	<0.012	<0.012	<0.012	<0.013	<0.014	0.156J	<0.013	<0.013	<0.013	<0.014
Pentachlorophenol	10.00	<0.032	<0.032	<0.032	<0.034	<0.036	<0.037	<0.036	<0.035	<0.035	<0.036
Phenanthrene	18581.82	<0.016	1.18	0.493	0.024J	<0.018	0.29	0.129	0.019J	0.105	0.077J
Phenol	2384.11	<0.019	<0.019	<0.019	<0.020	<0.022	<0.022	<0.021	0.092J	<0.021	<0.022
Pyrene	18581.82	<0.055	0.832J+	0.380J	<0.058	<0.062	0.063J	<0.062	<0.059	0.220J	0.122J
Pyridine	142.66	<0.022	<0.022	<0.022	<0.023	<0.025	<0.025	<0.025	<0.024	<0.024	<0.025

Notes:

1. All values in mg/kg.

2. Comparison criteria are the lower of the chemical of interest's EPA Region 6 Soil Screening Criteria value and TCEQ <sup>Tot</sup>Soil<sub>Comb</sub> value.

3. Sample locations are as follows (see text for additional descriptions):

T-15-F: from base of scraped area approximately 0.8 ft. below ground surface (bgs)

T-21-F: from base of scraped area approximately 0.5 ft. bgs

NC-0-0.3: from containment area floor surface to depth of 0.3 ft. bgs

T-2-WEST: west wall of excavation, near southwest corner, 2.5 ft bgs

T-6-FLOOR: floor of excavation, 5.8 ft bgs

T-6-EAST: east wall of excavation, 4.0 ft bgs

T-6-SOUTH: south wall of excavation, 4.5 ft bgs

T-6-NORTH: north wall of excavation, 2.0 ft bgs

SC-W: clay surface at base of trench, 0.7 ft bgs

SC-E: clay surface at base of trench, 0.7 ft bgs

4. Bold values exceed comparison criteria.

5. Data Qualifiers: J = estimated value; J+ = estimated value, biased high; R = rejected value.

## FIGURES



QUADRANGLE LOCATION



Scale in Feet

0 1000 2000

# **GULFCO MARINE MAINTENANCE** **FREEPORT, BRAZORIA COUNTY, TEXAS**

## Figure 1 **SITE LOCATION MAP**

PROJECT: 1597

BY: ZGK

REVISIONS

DATE: MARCH, 2011

CHECKED: EFP

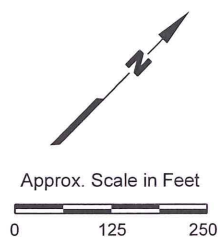
**PASTOR, BEHLING & WHEELER, LLC**  
 CONSULTING ENGINEERS AND SCIENTISTS

Source:  
 Base map taken from <http://www.tnris.state.tx.us> Freeport, Texas 7.5 min.  
 U.S.G.S. quadrangle, 1974.



### EXPLANATION

- Gulfco Marine Maintenance Site Boundary (approximate)
- Lot Boundary (approximate)



Source of photo: H-GAC, Texas aerial photograph, 2006.

## **GULFCO MARINE MAINTENANCE FREEPORT, BRAZORIA COUNTY, TEXAS**

### Figure 2 **SITE MAP**

PROJECT: 1597

BY: ZGK

REVISIONS


DATE: MARCH, 2011

CHECKED: EFP

**PASTOR, BEHLING & WHEELER, LLC**  
CONSULTING ENGINEERS AND SCIENTISTS

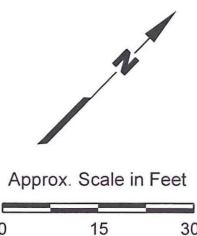


### EXPLANATION

 Monitoring Well Location - Zone A

**Note:**  
 Tank numbers, except 100, from LTE, 1999. Tank 100 (empty tank) removed by Hurricane Ike storm surge in September 2008.

Source of photo: H-GAC, Texas aerial photograph, 2006.



**GULFCO MARINE MAINTENANCE**  
FREEPORT, BRAZORIA COUNTY, TEXAS

Figure 3  
**FORMER AST TANK  
FARM AREA MAP**

PROJECT: 1597

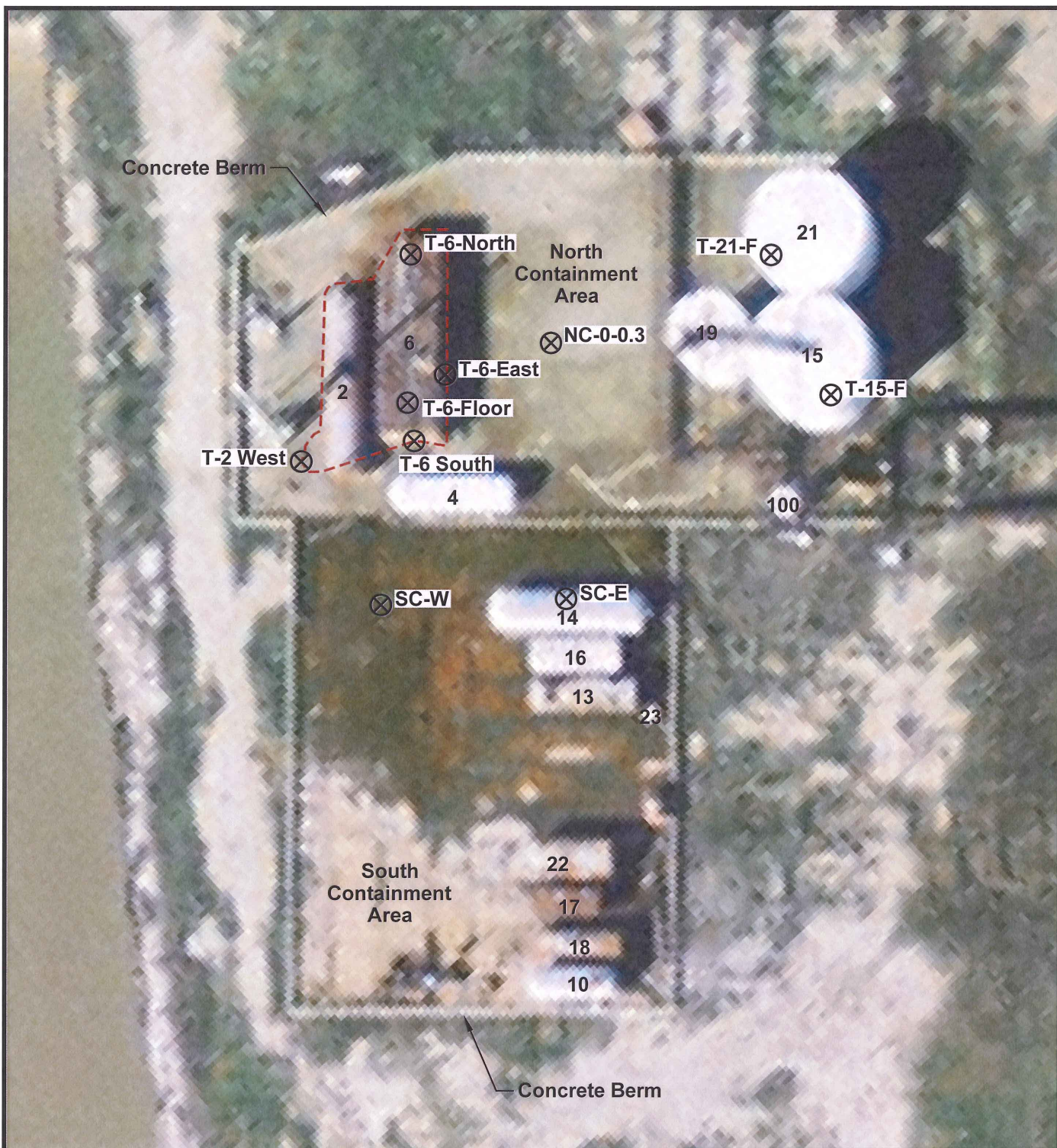
BY: ZGK

REVISIONS

DATE: MARCH, 2011

CHECKED: EFP

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#### EXPLANATION



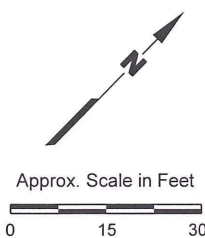
Sample Location

--- Approximate Extent of  
Excavation Beneath  
Tank Nos. 2 and 6

#### Note:

Tank numbers, except 100, from LTE, 1999. Tank No. 100 (empty tank) removed by Hurricane Ike storm surge in September 2008. Verification samples collected in January 2011 after all tanks removed. Locations are approximate.

Source of photo: H-GAC, Texas aerial photograph, 2006.



**GULFCO MARINE MAINTENANCE**  
FREEPORT, BRAZORIA COUNTY, TEXAS

Figure 4

### FORMER AST TANK FARM VERIFICATION SAMPLE LOCATIONS

PROJECT: 1597

BY: ZGK

REVISIONS

DATE: MARCH, 2011

CHECKED: EFP

**PASTOR, BEHLING & WHEELER, LLC**  
CONSULTING ENGINEERS AND SCIENTISTS

**APPENDIX A**  
**REMOVAL ACTION WORK PLAN**

**GULFCO MARINE MAINTENANCE SUPERFUND SITE  
REMOVAL ACTION WORK PLAN**

**JUNE 9, 2010**

## **GULFCO MARINE MAINTENANCE SUPERFUND SITE REMOVAL ACTION WORK PLAN**

### **I. INTRODUCTION**

#### **A. Purpose of the Work Plan**

This Work Plan sets forth certain requirements for completion of a removal action to remove or eliminate certain wastes, thereby eliminating or reducing risks from potential exposure pathways from those wastes at or from the Gulfco Marine Maintenance Superfund Site (the “Site”). The work described herein shall be implemented upon EPA’s signing of the Administrative Settlement Agreement and Order on Consent for Removal Action (AOC).

#### **B. Description of Action**

An aboveground storage tank farm (“AST Tank Farm”) located in the southern portion is to be addressed by this Removal Action. The AST Tank Farm is a concrete bermed area containing 14 above-ground storage tanks (a fifteenth tank, Tank No. 100, which was empty, was removed from the Site in September 2008 by Hurricane Ike storm surge), three of which appear to be empty. The tank locations and designations are shown on Figure 1. The contents of the tanks are to be removed and the tanks demolished. The concrete containment slab and walls will remain in place, except that the walls shall be breached so that rainfall will freely drain from the structure. Any accumulated water contained within the bermed area shall be characterized and properly managed. Any buried pipes will be capped at the surface after removing the contents of the pipes. The tanks’ contents and structures, containerized wastes, and debris will be properly managed off-site.

The specific objectives for the AST Tank Farm Removal Action are: (1) to prevent the release of chemicals of concern that are stored in the tanks and any other containers, and (2) to prevent the exposure of site workers and visitors to chemicals of concern remaining in the tanks following removal of the stored liquids and other materials. The tanks contain water, various organic phases, oily sludges, and sand, rust solids, and debris. The tanks’ contents include: benzene; chloroform; 1,2-dichloroethane; trichloroethylene; tetrachloroethylene; vinyl chloride; and petroleum hydrocarbons in various concentrations.

## **II. WORK TO BE PERFORMED**

### **A. Preconstruction Activities**

Preconstruction activities will consist of a Site inspection and assessment, and preparation of a Health and Safety Plan (HASP). The HASP will be prepared in compliance with Occupational Safety and Health Administration and EPA requirements. The HASP will be submitted to EPA and will be in place prior to any onsite construction activities. Site inspection and assessment shall begin with cutting weeds and vegetation as necessary to perform a visual inspection of the removal action area. This inspection shall be performed for safety purposes and to identify any drums or containers, which shall be visually inspected, inventoried, labeled with a control number, and logged, as necessary.

### **Sampling and Analysis Plan**

Sampling of the AST contents was performed during the period from December 14 through 15, 2006 in accordance with a Work Plan dated November 6, 2006 (and addendum dated December 1, 2006) that were approved by an EPA letter dated December 4, 2006. As part of sampling activities, fluid levels were gauged in all ASTs and samples were collected from separate solid and liquid phases within the tanks, where present. In addition to the AST samples, samples of water accumulated within the north and south containment areas of the AST Tank Farm were collected on December 14, 2006. The AST and water samples were transported to Gulf Coast Analytical Laboratories, Inc. (GCAL) in Baton Rouge, Louisiana for analysis for various waste characterization parameters (e.g., reactivity, corrosivity, ignitability, toxicity). The results of these analyses are summarized on attached Tables 1 through 4. The original laboratory reports for these analyses were included in a report describing the tank sampling activities that was submitted to EPA on April 4, 2007. A summary of the projected tank volumes based on the gauging estimates is provided in Table 5.

The AST and water sample data listed in Tables 1 through 4 will be used for the classification and profiling of waste streams for off-site management (treatment, disposal and/or recycling) as acceptable to the intended management facilities. Possible off-site waste management facilities are listed in Table 6. All materials will be managed at a facility that is in compliance with EPA's "Off-Site Rule". Should more recent or additional data be required by these facilities or the tank removal contractor, additional sampling and analyses will be performed as described below. Additional samples may be collected from the accumulated water within each of the north and south containment areas if necessary to evaluate possible discharge or other management options for that material. Sampling of accumulated sludge (if any) within the containment berms will be performed as necessary.

Tank Gauging – Prior to sampling or content removal (if sampling is not required), each AST will be gauged to verify the approximate content volume. For gauging and sampling purposes, the tanks will be accessed utilizing ladders and/or man lifts. Gauging will be performed using various devices, such as weighted lines, gauge

rulers, visible means, or other appropriate method based on the tank size and location, content characteristics, and content volume.

Sample Collection – Samples will be collected using dippers, sampling thieves and/or other sampling devices as appropriate depending on tank size, content type (solid or liquid) and content volume in order to obtain a representative sample. One representative sample will be collected from each tank waste stream. Containment area water and sludge samples will be collected directly from the containment areas using dippers, bailers, and/or other appropriate devices.

All sampling equipment will be decontaminated prior to use. Disposable equipment meant to be used only once and discarded will be decontaminated prior to use, unless the equipment is properly packaged and sealed. All non-disposable components of the sampling equipment will be decontaminated as follows:

- Potable water rinse;
- Liqui-nox® detergent wash;
- DI water rinse;
- Liqui-nox® detergent wash;
- DI water rinse; and
- Air dry.

A methanol or hexane rinse may be used if evidence of organic staining is found after equipment has been cleaned. Following decontamination, the sampling equipment will be placed in bags or sealed to keep the equipment clean during storage. All liquids generated as a result of decontamination processes will be containerized and handled as investigation-derived waste (IDW).

Samples will be transferred from the sampling devices to sample containers in a central staging area near the AST Tank Farm. Sample containers will be prepared specifically for the required analyses by the analytical laboratory. Any required preservatives will be placed in the sample containers by the laboratory prior to shipment to the Site.

To prevent misidentification of samples, labels will be affixed to each sample container. Information will be written on the label with a permanent marker. The labels will be sufficiently durable to remain legible even when wet and will contain the following information:

- Sampling identification name;
- Name or initials of collector;
- Date and time of collection;
- Analysis required (if space on label allows); and
- Preservative inside bottle, if applicable.

Sample custody, packaging and shipment will be performed in accordance with Standard Operating Procedure (SOP) No. 6 in the approved Gulfco RI/FS Field Sampling

Plan (FSP) (PBW, 2006a). Samples will be placed in shipping coolers containing bagged, cubed ice immediately following collection. Samples will be shipped to the laboratory via an overnight courier service, generally on the day they are collected.

Evidence of collection, shipment, and laboratory receipt must be documented on a Chain-of-Custody record by the signature of the individuals collecting, shipping and receiving each sample. A sample is considered in custody if it is:

- In a person's actual possession;
- In view, after being in physical possession;
- Sealed so that no one can tamper with it, after having been in physical custody; and/or
- In a secured area restricted to authorized personnel.

Chain-of-Custody Records will be used, by all personnel, to record the collection and shipment of all samples. The Chain-of-Custody Record may specify the analyses to be performed and should contain at least the following information:

- Name and address of originating location of samples;
- Name of laboratory where samples are sent;
- Any pertinent directions/instructions to laboratory;
- Sample type (e.g., aqueous);
- Listing of all sample bottles, size, identification, collection date and time, and preservative, if any, and type of analysis to be performed by the laboratory;
- Sample ID;
- Date and time of sample collection; and
- Signature of collector as relinquishing, with date/time.

The Chain-of-Custody procedure will be as follows:

- 1) The field technician collecting the sample shall be responsible for initiating the Chain-of-Custody Record. Samples can be grouped for shipment on a common form.
- 2) Each time responsibility for custody of the samples changes, the receiving and relinquishing custodians will sign the record and note the date and time.
- 3) The Chain-of-Custody Record shall be sealed in a watertight container, placed in the shipping container, and the shipping container sealed prior to giving it to the carrier. The carrier waybill shall serve as an extension of the Chain-of-Custody Record between the final field custodian and receipt in the laboratory. The commercial carrier is not considered part of the COC chain and is not required to sign the COC.
- 4) Upon receipt in the laboratory, a designated individual shall open the shipping containers, measure and record cooler temperature, compare the contents with the

Chain-of-Custody Record, and sign and date the record. Any discrepancies shall be noted on the Chain-of-Custody Record.

- 5) If discrepancies occur, the samples in question shall be segregated from normal sample storage and the project manager will be notified for clarification.
- 6) Chain-of-Custody Records, including waybills, if any, shall be maintained as part of the project records.

Sample Analyses - The analytical suite for AST and accumulated sludge samples (if any) will be determined based on the requirements of the removal action contractor and/or the off-site waste management facility to be used for the specific waste stream to be evaluated. Based on the previous data in Table 4, containment area water samples (if needed) will be analyzed for volatile organic compounds (VOCs), pesticides and metals using the methods listed for water samples in the approved RI/FS FSP. Considering the intended use of these data, validation will be performed at Data Review Level 2 as described in the approved Gulfco RI/FS Quality Assurance Project Plan QAPP (PBW, 2006b). Sample analyses will be performed by GCAL, whose laboratory QAPP was provided as Appendix G of the RI/FS QAPP. All analytical data collected for this removal action shall be provided electronically to EPA.

### **Construction Quality Assurance Plan**

The Construction Quality Assurance Plan (CQAP) for the removal action at the AST Tank Farm is provided below. This plan describes the project-specific components of the performance methods and quality assurance program to ensure that the completed project meets or exceeds all design criteria, plans, and specifications.

Responsibilities and Authorities - The Construction Quality Assurance (CQA) Officer will be Eric Pastor, P.E. of Pastor, Behling & Wheeler, LLC (PBW). Mr. Pastor will be assisted in the day-to-day project inspection activities by other PBW personnel, all of whom will have an appropriate level of engineering and/or consulting experience for their assigned responsibilities. EPA and/or its contractors may perform additional construction inspection/oversight at EPA's discretion.

CQA Qualifications - Mr. Pastor's and PBW's qualifications were provided to EPA in a letter dated August 26, 2005. As noted above, all inspection personnel will have an appropriate level of engineering and/or consulting experience for their assigned responsibilities.

CQA Inspection and Verification Activities - A CQA inspector will be on-site to monitor the performance of all tank content removal, truck loading, tank decontamination, and tank demolition activities; verify compliance with environmental requirements; and ensure compliance with all health and safety procedures. The CQA inspector will verify that removal action activities have been performed in accordance with this Work Plan and the project specifications. A CQA inspector will also collect the containment berm water and sludge (if any) samples as described above. CQA

inspection documentation will be performed in accordance with SOP No. 1 provided in Appendix A of the approved RI/FS FSP. This documentation will be retained in the project files in accordance with the requirements of Section XI of the AOC.

### **Regulatory Compliance Plan**

In accordance with the National Contingency Plan, removal actions under Section 106 of CERCLA are required to meet the substantive requirements of other laws unless an ARAR waiver is granted by the lead regulatory agency. Compliance with the administrative requirements (e.g., permitting, administrative reviews, reporting, and record keeping) of other laws is not required under CERCLA. The substantive ARARs are divided into the three categories:

- Chemical-specific requirements, health- or risk-based numerical values, or methodologies that specify the acceptable amount or concentration of a chemical that may be found in, or discharged to, the environment;
- Location-specific requirements- restrictions placed on the types of activities that can be conducted or on the concentration of hazardous substances that can be present solely because of the location where they will be conducted; and
- Action-specific requirements- technology or activity-based requirements or limitations on actions taken with respect to hazardous wastes.

Chemical-specific requirements – The primary chemical-specific requirements for the removal action at the AST Tank Farm are the chemical-specific waste classification standards under 30 TAC 335 Subchapter R and the hazardous waste identification requirements in 40 CFR Part 261. These requirements will be used for the classification of the tank contents prior to removal and off-site management.

Location-specific requirements – No location-specific requirements were identified for this removal action.

Action-specific requirements – Action-specific requirements for the removal action at the Former AST Tank Farm include the following:

- Texas Commission on Environmental Quality (TCEQ) standards for hazardous waste generators (30 TAC Chapter 335, Subchapter C), including the Land Disposal Restrictions (Chapter 335, Subchapter 0) for any wastes to be landfilled will apply. Procedures to be implemented for compliance with generator requirements include completion of a One-Time Shipment Request for Texas Waste Code For Shipment of Hazardous and Class 1 Waste (TCEQ Form 0757) and/or other required forms. Compliance with off-site waste shipment requirements including, U.S. Department of Transportation (DOT) regulations contained in 49 C.F.R. 173, and 179 and placarded regulations in 49 C.F.R. 172 will be ensured through the use of only permitted waste haulers. Compliance with off-site waste management requirements, including Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901, *et seq.* at 40 C.F.R. 260 *et seq.* and

related Texas state requirements will be ensured through the use of only the potential facilities listed in Table 6. Compliance with the provisions of the NCP, 40 C.F.R. 300.440, with regard to EPA approval of the off-site waste management facilities will be performed through EPA approval of this Work Plan.

- TPDES permit requirements for wastewater discharge will be used to determine limits for discharge of water collected within the AST Tank Farm containment berms to the Intracoastal Waterway.

### **Waste Management Plan**

The AST data listed in Tables 1 through 4, as supplemented by additional data collected through the sampling and analytical activities described in this Work Plan, will be used for the classification and profiling of waste streams for off-site management (treatment, disposal and/or recycling) as acceptable to the intended management facilities. Hazardous and non-hazardous wastes, as well as non-waste materials, shall be handled and managed in accordance with all applicable or relevant and appropriate requirements. To the extent possible based on tank content volumes, characteristics and waste classifications, the tank contents will be transferred directly from the tanks to the waste haulers (typically vacuum tankers) for liquid waste. Waste loads will be transported to one or more of the facilities listed in Table 6. All off-site transportation and management will be performed in accordance with applicable USDOT requirements. All materials will be managed at a facility that is in compliance with EPA's "Off-Site Rule". Wastewater from tank decontamination operations will be handled similarly. Following decontamination through triple rinsing, tanks not identified for re-use will be cut up and sold as scrap or disposed as non-hazardous waste. All loads will be properly manifested prior to leaving the Site.

### **Emissions Control Plan**

During tank liquid content transfer operations, tank vapors will be vented through carbon canister or similar devices. Air exhaust from vacuum trucks and any other exhaust that potentially could contain volatile emissions shall be captured and treated onsite with vapor-phase carbon.

Ambient air monitoring will be periodically performed by the remediation contractor while tank contents are being transferred from the ASTs to trucks, and while gauging and sampling (if any) of the ASTs is being performed. Monitoring will be performed for total organic vapors using an organic vapor meter with a photoionization detector. Ambient air monitoring will be performed both within the work zone and on the downwind perimeter of the work area. Air monitoring results within the work area will be evaluated in accordance with procedures established in the HASP. If a sustained reading (more than 60 seconds) of 10 ppmv or higher is measured at a perimeter monitoring location, work activities upwind of that location will temporarily cease. Monitoring will then be performed at that location every five minutes for 15 minutes (three times). If concentrations of total organic vapors subside below the 10 ppmv action level, work may resume with continued focused monitoring performed at that location. If

total organic vapor concentrations do not subside below the 10 ppmv action level, or if vapor concentrations consistently return to 10 ppmv or higher after work is resumed, the PBW and EPA Project Managers will be notified and potential engineering and/or other controls and contingency plans will be discussed and implemented as necessary prior to further work resumption. During tank content transfer activities, additional monitoring may be performed using chemical-specific Draeger tubes. Monitoring measurements will be recorded by contractor personnel and will be included in the Final Report.

### **Contingency Plan**

This contingency plan describes procedures to minimize hazards to human health and the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste constituents, procedures to be followed in the event of a spill, and procedures to be followed for movement of equipment and personnel from low-lying areas during a high water event.

**Spill Prevention** – In order to minimize the potential for spills or release of hazardous constituents to the environment, liquid tank contents will be transferred directly to transport trucks when possible. Potential spills at the tanks during this process will be contained by the existing tank containment berms. Receiving trucks will be loaded within temporary loading areas constructed to contain potential spills during the loading process. Spill control and cleanup kits along with fire extinguishers and eye wash kits will be located in the AST Tank Farm and loading areas.

**Spill Response/Notification** – In the event of a spill, field crews will immediately contain the spill as necessary to prevent a release and notify on-site CQA and EPA representatives. If not on-site, the EPA OSC will be notified immediately thereafter. In the event of any spill which causes or threatens a release of waste material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondents shall immediately notify the OSC or, in the event of his/her unavailability, the Regional Duty Officer, Emergency Planning and Response Branch, EPA Region 6, 214-665-3166, and the EPA Regional Emergency 24-hour telephone number, 1-866-372-7745. In addition, in the event of any release of a hazardous substance from the Site which, pursuant to Section 103 of CERCLA, requires reporting to the National Response Center, Respondents shall immediately notify the National Response Center at (800) 424-8802 and then the OSC at (866) 372-7745.-. A written report will be submitted to EPA within 7 days after a release of a hazardous substance from the Site that requires reporting to the National Response Center pursuant to Section 103(a) of CERCLA, 42 U.S.C. § 9603(a), setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the recurrence of such a release.

**Site Activities during High Water Event** – In the event that a high water condition (storm surge or hurricane) is predicted for the Site during the performance of the Work, the remediation contractor will take appropriate precautions to secure tanks, staging areas and equipment. Depending on the specific conditions, these precautions may include evacuation of the Site. The remediation contractor and the CQA officer will work closely

with the EPA representatives to determine the appropriate precautions to be taken on a case by case basis depending on the timing and severity of the predicted high water conditions.

### **Health and Safety Plan**

Prior to Site mobilization, the remediation contractor for the AST Tank Farm removal action will prepare a HASP in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992) and all currently applicable regulations found at 29 CFR 1910.120. The HASP will ensure the protection of the public health and safety during performance of the removal action and will be submitted to EPA for review. Changes to the plan recommended by EPA will be incorporated into the final plan that will be implemented during the pendency of the removal action. All requirements under the Occupational Safety and Health Act (OSHA) of 1970, 29 U.S.C. § 651 *et seq.*, and under the laws of the State approved under Section 18 of the Federal OSHA laws, as well as other applicable safety and health requirements, will be followed. Federal OSHA requirements include Hazardous Materials Operation, 29 CFR § 1910, as amended by 54 Fed. Reg. 9317 (March, 1989), all OSHA General Industry (29 CFR § 1910) and Construction (29 CFR § 1926) standards wherever they are applicable, as well as OSHA record keeping and reporting regulations, and the EPA regulations set forth in 40 CFR § 300, relating to the conduct of work at Superfund sites.

### **Schedule**

The AST Tank Farm removal action will be implemented as described herein. The HASP was previously submitted to EPA for information only but not approval on March 30, 2010. The removal action field activities shall be completed within ninety (90) calendar days of the Effective Date of the AOC. The Draft Tank Removal Report shall be submitted to EPA within one hundred twenty (120) calendar days of the Effective Date of the AOC. The Final Tank Removal Report shall be submitted to EPA within fourteen (14) calendar days following receipt of EPA comments on the draft Removal Report. Any associated documentation (e.g., transporter and disposal facility manifests, weigh tickets, etc.) received after the Final Report is submitted will be provided as an addendum to the report.

### **B. Mobilization and Site Preparation**

Mobilization and site preparation will involve mobilizing personnel, equipment, supplies and incidentals onto the project site; establishing all offices and facilities necessary to implement the project; and preparation of the site for the construction work. The major components of site preparation are:

- Utility Connections - Supplying electrical and potable water sources within the work area limits.

- Clearing and Grubbing - Clearing and grubbing and/or mowing areas as required for access to the work and surrounding areas and for constructing roads, work areas, and staging areas.
- Temporary Road Construction - Constructing temporary roads as necessary to provide access and egress to the site, and access and egress to the work areas.
- Work/Staging Area - Constructing work, staging and containment areas.

**C. Removal Action Activities**

AST Tank Farm removal action activities will consist of the following tasks:

Task 1 – Accumulated Water Removal – The purpose of this task is to remove any water accumulated within the containment berms in order to facilitate subsequent removal action activities. Data from water samples and other related information will be submitted to the TCEQ for determination of discharge limits that meet substantive TPDES permit requirements. If the water sample concentrations do not exceed these limits, the water will be discharged directly to the Intracoastal Waterway. If the water sample concentrations exceed the discharge limits, then the water will be transported for off-site management at one of the facilities listed in Table 6, or another facility approved in advance by EPA. This task will include the following:

- a. Sample and analyze the accumulated water, as needed, to confirm previous data, evaluate management options and facilitate removal;
- b. As necessary, transfer the water to temporary storage tanks to allow the removal action to continue pending determination of water discharge/management options;
- c. Appropriately manage (discharge or otherwise manage) the accumulated water based on the sample analyses and management option evaluation, in accordance with all applicable state and federal regulations; and
- d. Secure all records documenting the water characterization and subsequent management.

Task 2 – Container Content Removal and Disposal - The purpose of this task is to remove residual materials within AST Tank Farm containers followed by off-site management. Specifically, the liquid and sludge/solid contents of the above-ground storage tanks will be removed from the tanks and either recycled or disposed at one of the potential facilities listed in Table 6. To the extent possible based on tank content volumes, characteristics and waste classifications, the liquid tank contents will be transferred directly from the tanks to the waste haulers (typically vacuum tankers). The removal method for the tank contents will be determined after selection of the remedial contractor and will be selected and implemented to control volatile emissions. Debris that is encountered will be removed by suitable methods and placed into lined roll-off containers that will be covered except while the debris is being added. Transport of

residual containerized materials/wastes to appropriate off-site management facilities will be performed in accordance with all applicable state and federal regulations. All records documenting the waste stream characteristics, classifications, quantities and final management locations will be secured as part of this task.

Task 3 – Container Removal - The purpose of this task is to remove containers associated with former Site operations (e.g., ASTs and drums) from the AST Tank Farm area. The following activities will be performed as part of this task:

- a. Evaluate the potential for re-use of containers. Based on this evaluation, identify containers for re-use and containers for demolition and disposal/recycling;
- b. Decontaminate containers intended for re-use. Implement decontamination procedures on a container-specific basis considering former content characteristics and process knowledge. Decontamination procedures for containers intended for re-use will include the following:
  1. Remove material adhered to container sides using shovel or other tool;
  2. Scrub with a brush and detergent (or alternative cleaning solution as appropriate);
  3. Rinse with water;
  4. Repeat above steps; and
  5. Evaluate container condition and repeat one or more of above steps as necessary to provide visible indication of sufficient decontamination for container re-use. Alternative decontamination methods may be used as necessary and appropriate depending on the container contents and its intended re-use.
- c. Manage all decontamination fluids in accordance with applicable state and federal regulations. Document decontamination procedures used;
- d. Remove re-usable containers from the Site following proper decontamination. Document recipient of container to be reused; and
- e. Decontaminate and demolish all containers not suitable for re-use.

Decontamination procedures for containers intended for demolition will include the following:

1. Remove material adhered to container sides using shovel or other tool;
2. Scrub with a brush and detergent (or alternative cleaning solution as appropriate);

3. Rinse with water; and
4. Evaluate container condition and repeat one or more of above steps as necessary to provide visible indication of sufficient decontamination for container demolition. Alternative decontamination methods may be used as necessary and appropriate depending on the container contents and the demolition method to be used.

Demolition may be performed on or off-site. Secure a certificate of destruction for each item demolished. Transport tank demolition debris off-site for recycling or disposal.

Task 4 – AST Containment Area Decontamination - The purpose of this task is to decontaminate the former AST containment areas. The following activities will be performed as part of this task:

- a. Sample and analyze residual sludge (if any) within the containment berms to evaluate management options and facilitate waste classification (if needed);
- b. Remove and manage the sludge (if any) in accordance with all applicable state and federal regulations;
- c. Thoroughly pressure-wash the concrete floor and berms of the former AST Tank Farm and manage all washwater in accordance with all applicable state and federal regulations.
- d. Demolish sections of the concrete containment berms at multiple locations as needed to preclude potential future water accumulation within this area (the number, area and locations where the berms will be demolished will be determined after an evaluation of water flow/accumulation patterns within the containment area during the pressure washing); and
- e. Secure all records documenting the sludge characterization and subsequent management.

#### **D. Emissions Control**

The emissions control plan described above will be implemented throughout the removal and material-handling phases of the removal action to control air emissions. As noted therein, the air exhaust from any vacuum trucks and any other exhaust that potentially could contain volatile emissions (not including routine motor vehicle/construction equipment exhaust) will be captured and treated onsite with vapor-phase carbon.

#### **E. Site Restoration and Demobilization**

After completion of the removal action, the temporary roads and work areas will be dismantled and removed. Personnel, equipment, office trailer, supplies and incidentals

that were used on the removal project will be removed from the site, unless required for the completion of other work at the Site.

**F. Preparation of Final Report**

Any associated documentation (e.g., transporter and disposal facility manifests, weigh tickets, etc.) received after the Final Report is submitted will be provided as an addendum to the report. The Final Report will summarize the activities performed and will be submitted to the RPM/OSC for review and approval. The Final Report will include a listing of quantities and types of materials removed off-site or handled on-site, a discussion of removal and disposal options considered for those materials removed, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action.

### **III. REFERENCES**

Guevara, Jairo, 1989. Record of Communication for Reconnaissance Inspection of Former Surface Impoundments of Fish Engineering & Construction, Inc. November 28.

LT Environmental, Inc. (LTE), 1999. Site Characterization Report. Hercules Marine Service Site Freeport, Brazoria County Texas. June.

Pastor, Behling & Wheeler, LLC (PBW), 2006a. Sampling and Analysis Plan – Volume I Field Sampling Plan, Gulfco Marine Maintenance Site, Freeport, Texas. March 14.

Pastor, Behling & Wheeler, LLC (PBW), 2006b. Sampling and Analysis Plan – Volume II Quality Assurance Project Plan, Gulfco Marine Maintenance Site, Freeport, Texas. March 14.

## **TABLES**

**Table 1**  
**Gulfco Former AST Tank Farm**  
**Tank Sample - RCI/Toxicity Data**

Tank No.	Sample ID.	Physical Description	pH	Reactivity Sulfide	Reactivity Cyanide	Flashpoint	Arsenic	Barium	Benzene	Cadmium	Carbon Tetrachloride
				ppm	ppm	Deg. F.	mg/L	mg/L	mg/L	mg/L	mg/L
Tank No. 2	TK-2-O	Aqueous Phase	NA	NA	NA	NA	<0.0024	12.1	<0.177	NA	NA
	TK-2-O	Organic Phase	5.95	112	<250	>212	<0.0024	8.19	0.415 J	0.0033 B	<0.013
	TK-2-S	Solids- sand, debris, etc.	NA	NA	NA	NA	<0.0024	2.82	24.1	0.0038 B	<0.256
Tank No. 4	TK-4-A	Oily Water	7.4	<96	<250	>212	<0.0024	29.7	<0.000177	0.016	<0.000336
Tank No. 6	TK-6-S	Rust Solids	NA	NA	NA	NA	<0.0024	0.89 B	<0.009	0.002 B	<0.00512
Tank No. 13	TK-13-O	Oily sludge	6.89	80	<250	>212	<0.0024	0.27 B	13.8	<0.00022	<0.128
Tank No. 14	None	Empty (2 in. of rust solids)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tank No. 15	TK-15-O	Oily sludge	6.38	<80	<250	126	<0.0024	0.22 B	5.3	<0.00022	<0.00512
Tank No. 16	TK-16-O	Oily sludge	6.31	<80	<250	>212	<0.0024	0.39 B	<0.009	<0.00022	<0.00512
Tank No. 17	TK-17-S	Rust solids	NA	NA	NA	NA	<0.0024	0.56 B	<0.009	0.0012 B	<0.00512
Tank No. 18	TK-18-O	Light Organic Phase	3.37	<417	<250	90	<0.024	0.53 B	<9	<0.0022	<5.12
Tank No. 19	TK-19-O	Oily sludge	6.75	216	<250	104	<0.0024	1.33	<4.5	<0.00022	<2.56
Tank No. 21	TK-21-A	Oily water	8.5	<80	<250	>212	<0.0024	0.0021 B	51.6 J	<0.00022	<5.12
Tank No. 22	TK-22-O	Oily sludge	6.74	<80	<250	>212	<0.0024	0.28 B	<0.009	<0.00022	<0.00512
Tank No. 23	TK-23-O (mg/kg)	Appears to be diesel	6.72	160	<250	126	<0.16	0.26B	<2.08	<0.013	<2.4
North Containment Area	Dike North	Water	NA	NA	NA	NA	0.012	1.17	0.011	<0.00019	0.00889 J
South Containment Area	Dike South	Water	NA	NA	NA	NA	0.024	0.49	0.015	<0.00019	<0.000336
Hazardous Criteria			<= 2 or >= 12.5	>= 500	>= 250	<140	5	100	0.5	1	0.5

**Table 1**  
**Gulfco Former AST Tank Farm**  
**Tank Sample - RCI/Toxicity Data**

Tank No.	Sample ID.	Physical Description	Chlordane mg/L	Chlorobenzene mg/L	Chloroform mg/L	Chromium mg/L	o-Cresol mg/L	m,p-Cresol mg/L	Cresol mg/L	1,2-Dichloroethane mg/L	1,4-Dichlorobenzene mg/L	2,4'-D mg/L
Tank No. 2	TK-2-O	Aqueous Phase	NA	<0.162	1.5 J	0.16	<0.409	<0.368	NA	7.97	<0.0538	NA
	TK-2-O	Organic Phase	<0.00008	<0.021	2.25	<0.0012	<0.0012	<0.0014	<0.003	8.4	<0.0011	<0.0027
	TK-2-S	Solids- sand, debris, etc.	<0.00008	<0.426	20.7	0.0045 B	0.00275 J	<0.0014	0.00414 J	203	<0.0011	<0.0027
Tank No. 4	TK-4-A	Oily Water	NA	<0.000162	<0.00018	<0.0012	<0.00327	<0.00295	NA	<0.000176	<0.000538	<0.00027
Tank No. 6	TK-6-S	Rust Solids	<0.00008	<0.00852	<0.00776	<0.0012	<0.0012	<0.0014	<0.003	<0.0082	<0.0011	<0.0027
Tank No. 13	TK-13-O	Oily sludge	<0.00008	<0.213	1.32 J	<0.0012	<0.0012	0.00143 J	<0.003	2.73 J	<0.0011	<0.0027
Tank No. 14	None	Empty (2 in. of rust solids)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tank No. 15	TK-15-O	Oily sludge	<0.00008	<0.00852	<0.00776	<0.0012	<0.013 J	<0.0014	0.013 J	<0.0082	<0.0011	<0.0027
Tank No. 16	TK-16-O	Oily sludge	<0.00008	<0.00852	<0.00776	<0.0012	<0.0012	0.037 J	0.037 J	<0.0082	<0.0011	<0.0027
Tank No. 17	TK-17-S	Rust solids	<0.0004	<0.00852	<0.00776	<0.0012	<0.0012	<0.0014	<0.003	<0.0082	<0.0011	<0.0027
Tank No. 18	TK-18-O	Light Organic Phase	<0.01431	<8.52	216	<0.012	<0.1764	<0.2134	<0.444	<8.2	<0.1577	<0.0027
Tank No. 19	TK-19-O	Oily sludge	<0.00008	<4.26	<3.88	<0.0012	0.0046 J	<0.0014	0.00486 J	<4.1	<0.0011	<0.0027
Tank No. 21	TK-21-A	Oily water	<0.00008	<8.52	2100	<0.0012	<0.0012	<0.0014	<0.003	224	<0.0011	<0.0027
Tank No. 22	TK-22-O	Oily sludge	<0.00008	<0.00852	<0.00776	<0.0012	<0.0012	0.00364 J	0.00364 J	<0.0082	<0.0011	<0.0027
Tank No. 23	TK-23-O (mg/kg)	Appears to be diesel	NA	<3.31	<2.83	<0.049	NA	NA	NA	<2.28	<8.44	NA
North Containment Area	Dike North	Water	NA	<0.000324	0.095	0.0028 B	<0.000327	<0.000295	NA	0.045	<0.00108	<0.0027
South Containment Area	Dike South	Water	NA	<0.000162	0.03	0.0031 B	<0.000327	<0.000295	NA	0.00304 J	<0.000538	<0.00027
Hazardous Criteria			0.03	100	6	5	200	200	200	0.5	7.5	10

**Table 1**  
**Gulfco Former AST Tank Farm**  
**Tank Sample - RCI/Toxicity Data**

Tank No.	Sample ID.	Physical Description	1,1-Dichloroethene	2,4-Dinitrotoluene	Endrin	Heptachlor	Heptachlor Epoxide	Hexachlorobenzene	Hexachlorobutadiene	Hexachloroethane	Lead
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Tank No. 2	TK-2-O	Aqueous Phase	<0.205	<0.579	NA	NA	NA	<0.32	<0.45	<1.05	<0.0013
	TK-2-O	Organic Phase	<0.023	<0.0036	<0.00007	<0.00004	<0.00005	<0.0015	<0.0017	<0.0016	0.043 B
	TK-2-S	Solids- sand, debris, etc.	<0.458	<0.0036	<0.00007	<0.00004	<0.0005	<0.0015	<0.0017	<0.0016	0.0084 B
Tank No. 4	TK-4-A	Oily Water	<0.000205	<0.00464	<0.0000832	<0.0000439	0.00065	<0.00256	<0.00045	<0.00842	0.28
Tank No. 6	TK-6-S	Rust Solids	<0.00916	<0.0036	<0.00007	<0.00004	<0.00005	<0.0015	<0.0017	<0.0016	0.0028 B
Tank No. 13	TK-13-O	Oily sludge	<0.229	<0.0036	<0.00007	<0.00004	0.00057	<0.0015	<0.0017	<0.0016	0.0035 B
Tank No. 14	None	Empty (2 in. of rust solids)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tank No. 15	TK-15-O	Oily sludge	<0.00916	<0.0036	<0.00007	<0.00004	<0.00005	<0.0015	<0.0017	<0.0016	<0.0013
Tank No. 16	TK-16-O	Oily sludge	<0.00916	<0.0036	<0.00007	<0.00004	<0.00005	<0.0015	<0.0017	<0.0016	<0.0013
Tank No. 17	TK-17-S	Rust solids	<0.00916	<0.0036	<0.00033	<0.00019	<0.00024	<0.0015	<0.0017	<0.0016	0.022 B
Tank No. 18	TK-18-O	Light Organic Phase	<9.16	<0.5339	<0.01182	0.029 J	<0.00862	<0.2179	<0.248	<0.2358	<0.013
Tank No. 19	TK-19-O	Oily sludge	<4.58	<0.0036	<0.00007	<0.00004	<0.00005	<0.0015	<0.0017	<0.0016	0.0056 B
Tank No. 21	TK-21-A	Oily water	<9.16	<0.0036	<0.00007	<0.00004	<0.00005	<0.0015	<0.0017	<0.0016	<0.0013
Tank No. 22	TK-22-O	Oily sludge	<0.00916	<0.0036	<0.00007	<0.00004	<0.00005	<0.0015	<0.0017	<0.0016	<0.0013
Tank No. 23	TK-23-O (mg/kg)	Appears to be diesel	<3.19	NA	NA	NA	NA	NA	<24.9	NA	<0.097
North Containment Area	Dike North	Water	<0.000411	<0.000464	<0.00000832	<0.00000439	<0.00000732	<0.000256	<0.0009	<0.000842	<0.0013
South Containment Area	Dike South	Water	<0.000205	<0.000464	<0.00000832	<0.00000439	0.0000329	<0.000256	<0.00045	<0.000842	0.0044 B
Hazardous Criteria			0.7	0.13	0.02	0.008	0.008	0.13	0.5	3	5

**Table 1**  
**Gulfco Former AST Tank Farm**  
**Tank Sample - RCI/Toxicity Data**

Tank No.	Sample ID.	Physical Description	Lindane mg/L	Mercury mg/L	Methoxychlor mg/L	MEK mg/L	Nitrobenzene mg/L	Pentachlorophenol mg/L	Pyridine mg/L	Selenium mg/L	Silver mg/L
Tank No. 2	TK-2-O	Aqueous Phase	<0.00003	0.00004	NA	13.4	<0.452	<1.33	<0.437	0.03 B	<0.0006
	TK-2-O	Organic Phase	<0.00003	0.00037	<0.00032	9.77	<0.0008	<0.0037	<0.0182	<0.0046	<0.0006
	TK-2-S	Solids- sand, debris, etc.	<0.00003	0.00014 B	<0.00032	30	<0.0008	<0.0037	<0.0182	<0.0046	<0.0006
Tank No. 4	TK-4-A	Oily Water	0.00035	0.00017 B	0.0018 J	0.011	<0.00362	<0.011	<0.00349	<0.0046	<0.0006
Tank No. 6	TK-6-S	Rust Solids	<0.00003	0.00013 B	<0.00032	<0.017	<0.0008	<0.0037	<0.0182	0.014 B	<0.0006
Tank No. 13	TK-13-O	Oily sludge	<0.00003	0.00012 B	<0.00032	<0.429	<0.0008	<0.0037	<0.0182	0.006 B	<0.0006
Tank No. 14	None	Empty (2 in. of rust solids)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tank No. 15	TK-15-O	Oily sludge	<0.00003	0.00039	<0.00032	0.085 J	<0.0008	<0.0037	<0.0182	0.0095 B	<0.0006
Tank No. 16	TK-16-O	Oily sludge	<0.00003	0.00011 B	<0.00032	0.367	<0.0008	<0.0037	<0.0182	0.013 B	<0.0006
Tank No. 17	TK-17-S	Rust solids	0.0185	0.00015 B	<0.00162	<0.017	<0.0008	<0.0037	<0.0182	<0.0046	<0.0006
Tank No. 18	TK-18-O	Light Organic Phase	<0.00556	<0.0048	<0.05816	<17.2	<0.1262	<0.5607	<2.74	0.88 B	<0.006
Tank No. 19	TK-19-O	Oily sludge	<0.00003	0.00008 B	<0.00032	<8.58	<0.0008	<0.0037	<0.0182	0.0064 B	<0.0006
Tank No. 21	TK-21-A	Oily water	<0.00003	0.00012 B	<0.00032	<17.2	<0.0008	<0.0037	<0.0182	<0.0046	<0.0006
Tank No. 22	TK-22-O	Oily sludge	<0.00003	0.00013 B	<0.00032	0.874	<0.0008	<0.0037	<0.0182	0.0067 B	<0.0006
Tank No. 23	TK-23-O (mg/kg)	Appears to be diesel	NA	0.011	NA	<6.25	NA	NA	NA	1.6B	<0.047
North Containment Area	Dike North	Water	<0.00000255	<0.00004	<0.00000214	<0.00217	<0.000362	<0.00106	<0.000349	0.0049 B	<0.0006
South Containment Area	Dike South	Water	<0.00000255	<0.00004	<0.00000214	<0.00109	<0.000362	<0.00106	<0.000349	<0.0046	<0.0006
Hazardous Criteria			0.4	0.2	10	200	2	100	5	1	5

**Table 1**  
**Gulfco Former AST Tank Farm**  
**Tank Sample - RCI/Toxicity Data**

Tank No.	Sample ID.	Physical Description	Tetrachloroethylene mg/L	Toxaphene mg/L	Trichloroethylene mg/L	2,4,5-Trichlorophenol mg/L	2,4,6-Trichlorophenol mg/L	2,4,5-TP (Silvex) mg/L	Vinyl Chloride mg/L
Tank No. 2	TK-2-O	Aqueous Phase	<0.768	NA	0.851 J	<0.508	<0.525	NA	<0.383
	TK-2-O	Organic Phase	<0.023	<0.00025	1.52	<0.001	<0.0021	<0.0016	0.247 J
	TK-2-S	Solids- sand, debris, etc.	55.7	<0.00025	205	<0.001	<0.0021	<0.0016	<0.01
Tank No. 4	TK-4-A	Oily Water	<0.000768	<0.00275	0.00102 J	<0.00406	<0.00042	<0.00013	<0.000383
Tank No. 6	TK-6-S	Rust Solids	<0.00908	<0.00025	0.027 J	<0.001	<0.0021	<0.0016	<0.00356
Tank No. 13	TK-13-O	Oily sludge	47.7	<0.00025	2.98 J	<0.001	<0.0021	<0.0016	0.988 J
Tank No. 14	None	Empty (2 in. of rust solids)	NA	NA	NA	NA	NA	NA	NA
Tank No. 15	TK-15-O	Oily sludge	<0.00908	<0.00025	<0.011	<0.001	<0.0021	<0.0016	<0.00356
Tank No. 16	TK-16-O	Oily sludge	<0.00908	<0.00025	<0.011	<0.001	<0.0021	<0.0016	<0.00356
Tank No. 17	TK-17-S	Rust solids	<0.00908	<0.00125	<0.011	<0.001	<0.0021	<0.0016	<0.00356
Tank No. 18	TK-18-O	Light Organic Phase	<9.08	<0.045	<10.8	<0.1552	<0.3149	<0.0016	<3.56
Tank No. 19	TK-19-O	Oily sludge	<4.54	<0.00025	<5.4	<0.001	<0.0021	<0.0016	<1.78
Tank No. 21	TK-21-A	Oily water	<9.08	<0.00025	<10.8	<0.001	<0.0021	<0.0016	<3.56
Tank No. 22	TK-22-O	Oily sludge	<0.00908	<0.00025	<0.011	<0.001	<0.0021	<0.0016	<0.00356
Tank No. 23	TK-23-O (mg/kg)	Appears to be diesel	<3.85	NA	<3.55	NA	NA	NA	<7.03
North Containment Area	Dike North	Water	0.00627 J	<0.000275	0.018	<0.000406	<0.00042	<0.00013	<0.000765
South Containment Area	Dike South	Water	<0.000768	<0.000275	<0.000702	<0.000406	<0.00042	<0.00013	<0.000383
Hazardous Criteria			0.7	0.5	0.5	400	2	1	0.2

**Table 1**  
**Gulfco Former AST Tank Farm**  
**Tank Sample - RCI/Toxicity Data**

Tank No.	Sample ID.	Physical Description	Comments
Tank No. 2	TK-2-O	Aqueous Phase	Total Data
	TK-2-O	Organic Phase	TCLP Data
	TK-2-S	Solids- sand, debris, etc.	TCLP Data
Tank No. 4	TK-4-A	Oily Water	Total Data
Tank No. 6	TK-6-S	Rust Solids	TCLP Data
Tank No. 13	TK-13-O	Oily sludge	TCLP Data
Tank No. 14	None	Empty (2 in. of rust solids)	
Tank No. 15	TK-15-O	Oily sludge	TCLP Data
Tank No. 16	TK-16-O	Oily sludge	TCLP Data
Tank No. 17	TK-17-S	Rust solids	TCLP Data
Tank No. 18	TK-18-O	Light Organic Phase	TCLP Data
Tank No. 19	TK-19-O	Oily sludge	TCLP Data
Tank No. 21	TK-21-A	Oily water	TCLP Data
Tank No. 22	TK-22-O	Oily sludge	TCLP Data
Tank No. 23	TK-23-O (mg/kg)	Appears to be diesel	Total Data (mg/kg)
North Containment Area	Dike North	Water	Total Data
South Containment Area	Dike South	Water	Total Data
Hazardous Criteria			

**Table 2**  
**Gulfco Former AST Tank Farm**  
**Tank Sample TPH/PCB Data**

Tank No.	Sample ID.	Physical Description	C6-C12	>C12-C28	>C28-C35	Total TPH (C6-C35)	Arachlor-1016	Arachlor-1221	Arachlor-1232	Arachlor-1242	Arachlor-1248
Tank No. 4	TK-4-A	Oily Water	16.7J	130	<26.6	147	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Tank No. 6	TK-6-S	Rust Solids	<100	1,140	1,630	2,770	<1.2	<1.2	<1.2	<1.2	<1.2
Tank No. 13	TK-13-O	Oily sludge	<10	468,000	275,000	743,000	<120	<120	<120	<120	<120
Tank No. 15	TK-15-O	Oily sludge	135,000	719,000	197,000	>99%	<1.2	<1.2	<1.2	<1.2	<1.2
Tank No. 16	TK-16-O	Oily sludge	<20	761,000	512,000	>99%	<1.2	<1.2	<1.2	<1.2	<1.2
Tank No. 17	TK-17-S	Rust solids	<111	880	360	1,240	<1.33	<1.33	<1.33	<1.33	<1.33
Tank No. 18	TK-18-O	Light Organic Phase	961,000	37,800	<50	999,000	<1.2	<1.2	<1.2	<1.2	<1.2
Tank No. 19	TK-19-O	Oily sludge	59,600	441,000	128,000	629,000	<1.2	<1.2	<1.2	<1.2	<1.2
Tank No. 21	TK-21-A	Oily water	<20	51,400	266,000	780,000	<99.3	<99.3	<99.3	<99.3	<99.3
Tank No. 22	TK-22-O	Oily sludge	<20	789,000	449,000	>99%	<1.2	<1.2	<1.2	<1.2	<1.2
Tank No. 23	TK-23-O	Appears to be diesel	260,000	1,230,000	<50	>99%	<1.2	<1.2	<1.2	<1.2	<1.2
North Containment Area	Dike North	Water	<5.42	2.5J	<5.42	2.5J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
South Containment Area	Dike South	Water	<5.36	<5.36	<5.36	<16.1	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

**Table 2**  
**Gulfco Former AST Tank Farm**  
**Tank Sample TPH/PCB Data**

Tank No.	Sample ID.	Physical Description	Arachlor-1254	Arachlor-1260	Comments
Tank No. 4	TK-4-A	Oily Water	<0.0005	<0.0005	mg/L
Tank No. 6	TK-6-S	Rust Solids	<1.2	<1.2	mg/kg
Tank No. 13	TK-13-O	Oily sludge	<120	<120	mg/kg
Tank No. 15	TK-15-O	Oily sludge	<1.2	<1.2	mg/kg
Tank No. 16	TK-16-O	Oily sludge	<1.2	<1.2	mg/kg
Tank No. 17	TK-17-S	Rust solids	<1.33	<1.33	mg/kg
Tank No. 18	TK-18-O	Light Organic Phase	<1.2	<1.2	mg/kg
Tank No. 19	TK-19-O	Oily sludge	<1.2	<1.2	mg/kg
Tank No. 21	TK-21-A	Oily water	<99.3	<99.3	mg/kg
Tank No. 22	TK-22-O	Oily sludge	<1.2	<1.2	mg/kg
Tank No. 23	TK-23-O	Appears to be diesel	<1.2	<1.2	mg/kg
North Containment Area	Dike North	Water	<0.0005	<0.0005	mg/L
South Containment Area	Dike South	Water	<0.0005	<0.0005	mg/L

**Table 3**  
**Gulfco Former AST Tank Farm**  
**TK-21-A Sample Total Concentrations - Detected Values**

Parameter	Concentration (mg/kg)
<b>VOCs</b>	
1,2-Dichloroethane	663
Benzene	121 J
Chloroform	6,850
Isopropylbenzene (Cumene)	119 J
Methylene chloride	241 J
Toluene	179 J
<b>SVOCs</b>	
2-Methylnaphthalene	145 B
Benzaldehyde	123 J
Biphenyl	54.4 J
Bis(2-Ethylhexyl)phthalate	36.5 J
Caprolactum	2,410
Crysene	23.3 J
Fluorene	82.7 J
Phenanthrene	283
Pyrene	85.5 J
<b>Metals</b>	
Barium	7.09
Cadmium	0.062 J
Calcium	304
Chromium	2.28
Iron	1,660
Lead	2.44
Manganese	9.61
Mercury	0.027
Selenium	0.92 J
Silver	0.12 J
<b>TPH (TX 1005)</b>	
>C12-C28	514,000
>C28-C35	266,000
Total TPH	780,000
<b>Pesticides/Herbicides</b>	
Endosulfan I	1.25 J
Endosulfan II	3.72 J
Endrin aldehyde	2.9 J
Endrin ketone	9.6 J
gamma-Chlordane	3.1 J
2,4,5-T	0.446 J

**Notes:**

1. Only chemicals of interest detected above the sample detection limit are included in
2. Data qualifiers: J = Estimated value for organics. B = detected in blank sample.

**Table 4**  
**Gulfc0 Former AST Tank Farm**  
**North and South Containment Dike Sample Analytical Results**

Parameter	Dike North	Dike South
<b>VOCs</b>	<b>mg/L</b>	<b>mg/L</b>
1,1,1,2-Tetrachloroethane	<0.000965	<0.000482
1,1,1-Trichloroethane	0.031	<0.000461
1,1,2,2-Tetrachloroethane	<0.00024	<0.00012
1,1,2-Trichloroethane	<0.000665	<0.000333
1,1-Dichloroethane	0.00244 J	<0.000237
1,1-Dichloroethene	<0.000411	<0.000205
1,1-Dichloropropene	<0.00058	<0.00029
1,2,3-Trichloropropane	<0.00145	<0.000726
1,2,4-Trichlorobenzene	<0.000422	<0.000211
1,2,4-Trimethylbenzene	0.0037 J	0.00939
1,2-Dibromo-3-chloropropane	<0.00038	<0.00019
1,2-Dibromoethane	<0.000539	<0.000269
1,2-Dichlorobenzene	<0.000801	<0.000401
1,2-Dichloroethane	0.045	0.00304 J
1,2-Dichloropropane	<0.000507	<0.000254
1,3,5-Trimethylbenzene	<0.000422	0.00235 J
1,3-Dichlorobenzene	<0.00063	<0.000315
1,3-Dichloropropane	<0.000511	<0.000255
1,4-Dichlorobenzene	<0.00108	<0.000538
2,2-Dichloropropane	<0.000532	<0.000266
2-Butanone	<0.00217	<0.00109
2-Chloroethylvinyl ether	<0.00109	<0.000547
2-Chlorotoluene	<0.000603	<0.000301
2-Hexanone	<0.000823	<0.000412
4-Chlorotoluene	<0.000661	<0.000331
4-Isopropyltoluene	<0.000242	<0.000121
4-Methyl-2-pentanone	<0.0000996	<0.0000498
Acetone	<0.00382	0.021 J
Acrolein	<0.00403	<0.00201
Acrylonitrile	<0.00646	<0.00323
Benzene	0.011	0.015
Bromobenzene	<0.000641	<0.000321
Bromodichloromethane	<0.000289	<0.000145
Bromoform	<0.000755	<0.000377
Bromomethane	<0.00155	<0.000774
Carbon disulfide	<0.000487	<0.000244
Carbon tetrachloride	0.00889 J	<0.000336
Chlorobenzene	<0.000324	<0.000162
Chloroethane	<0.00115	<0.000574
Chloroform	0.095	0.03
Chloromethane	<0.00129	<0.000645
cis-1,2-Dichloroethene	0.00513 J	<0.000292
cis-1,3-Dichloropropene	<0.00033	<0.000165
Cyclohexane	0.00293 J	0.000936 J
Dibromochloromethane	<0.000455	<0.000228
Dibromomethane	<0.000756	<0.000378

**Table 4**  
**Gulfc0 Former AST Tank Farm**  
**North and South Containment Dike Sample Analytical Results**

Parameter	Dike North	Dike South
<b>VOCs (cont'd)</b>		
Dichlorodifluoromethane	<0.000677	<0.000339
Ethylbenzene	0.011	0.00135 J
Hexachlorobutadiene	<0.0009	<0.00045
Isopropylbenzene (Cumene)	0.00453 J	0.000515 J
m,p-Xylene	0.00292 J	0.011
Methyl Acetate	<0.00169	<0.000847
Methyl iodide	<0.000841	<0.00042
Methylcyclohexane	<0.000378	<0.000189
Methylene chloride	0.012 J	0.000765 J
Naphthalene	0.023	0.096
n-Butyl alcohol	<0.05	<0.025
n-Butylbenzene	<0.000561	<0.000281
n-Propylbenzene	<0.000609	<0.000305
o-Xylene	0.00189 J	0.00476 J
sec-Butylbenzene	<0.000598	<0.000299
Styrene	<0.000304	<0.000152
tert-Butyl methyl ether (MTBE)	<0.000358	<0.000179
tert-Butylbenzene	<0.000573	<0.000287
Tetrachloroethene	0.00627 J	<0.000768
Toluene	0.00791 J	0.033
trans-1,2-Dichloroethene	<0.000747	<0.000374
trans-1,3-Dichloropropene	<0.000359	<0.00018
trans-1,4-Dichloro-2-butene	<0.00143	<0.000717
Trichloroethene	0.018	<0.000702
Trichlorofluoromethane	<0.00051	<0.000255
Trichlorotrifluoroethane	<0.00072	<0.00036
Vinyl acetate	<0.000756	<0.000378
Vinyl chloride	<0.000765	<0.000383
Xylene (total)	0.00481 J	0.016
<b>SVOCs</b>		
1,2Diphenylhydrazine/Azobenzen	<0.000204	<0.000204
2,4,5-Trichlorophenol	<0.000406	<0.000406
2,4,6-Trichlorophenol	<0.00042	<0.00042
2,4-Dichlorophenol	<0.000387	<0.000387
2,4-Dimethylphenol	<0.00131	<0.00131
2,4-Dinitrophenol	<0.00112	<0.00112
2,4-Dinitrotoluene	<0.000464	<0.000464
2,6-Dinitrotoluene	<0.00041	<0.00041
2-Chloronaphthalene	<0.000343	<0.000343
2-Chlorophenol	<0.000344	<0.000344
2-Methylnaphthalene	<0.000102	<0.000102
2-Nitroaniline	<0.000267	<0.000267
2-Nitrophenol	<0.000522	<0.000522
3,3'-Dichlorobenzidine	<0.00208	<0.00208
3-Nitroaniline	<0.0004	<0.0004
4,6-Dinitro-2-methylphenol	<0.000284	<0.000284
4-Bromophenyl phenyl ether	<0.000366	<0.000366
4-Chloro-3-methylphenol	<0.000408	<0.000408

**Table 4**  
**Gulfco Former AST Tank Farm**  
**North and South Containment Dike Sample Analytical Results**

Parameter	Dike North	Dike South
<b>SVOCs (cont'd)</b>		
4-Chloroaniline	<0.000786	<0.000786
4-Chlorophenyl phenyl ether	<0.000346	<0.000346
4-Nitroaniline	<0.000564	<0.000564
4-Nitrophenol	<0.00201	<0.00201
Acenaphthene	<0.000135	<0.000135
Acenaphthylene	<0.0000884	<0.0000884
Acetophenone	0.00633 J	<0.000371
Aniline	<0.000556	<0.000556
Anthracene	<0.000102	<0.000102
Atrazine (Aatrex)	<0.00205	<0.00205
Benzaldehyde	<0.00121	<0.00121
Benzidine	<0.00718	<0.00718
Benzo(a)anthracene	<0.0000796	<0.0000796
Benzo(a)pyrene	<0.00015	<0.00015
Benzo(b)fluoranthene	<0.000165	<0.000165
Benzo(g,h,i)perylene	<0.000141	<0.000141
Benzo(k)fluoranthene	<0.0000662	<0.0000662
Benzoic acid	<0.001	<0.001
Benzyl alcohol	<0.000442	<0.000442
Biphenyl	<0.000341	<0.000341
Bis(2-Chloroethoxy)methane	<0.000241	<0.000241
Bis(2-Chloroethyl)ether	<0.00047	<0.00047
Bis(2-Chloroisopropyl)ether	<0.000528	<0.000528
Bis(2-Ethylhexyl)phthalate	<0.00191	<0.00191
Butyl benzyl phthalate	<0.000356	<0.000356
Caprolactam	<0.00258	<0.00258
Carbazole	<0.000293	<0.000293
Chrysene	<0.0000563	<0.0000563
Dibenz(a,h)anthracene	<0.000257	<0.000257
Dibenzofuran	<0.00032	<0.00032
Diethyl phthalate	<0.000257	<0.000257
Dimethyl phthalate	<0.000206	<0.000206
Di-n-butyl phthalate	<0.000944	<0.000944
Di-n-octyl phthalate	<0.000889	<0.000889
Fluoranthene	<0.000155	<0.000155
Fluorene	<0.00011	<0.00011
Hexachlorobenzene	<0.000256	<0.000256
Hexachlorocyclopentadiene	<0.000597	<0.000597
Hexachloroethane	<0.000842	<0.000842
Indeno(1,2,3-cd)pyrene	<0.000158	<0.000158
Isophorone	<0.00024	<0.00024
m,p-Cresol	<0.000295	<0.000295
Nitrobenzene	<0.000362	<0.000362
n-Nitrosodimethylamine	<0.00101	<0.00101
n-Nitrosodi-n-propylamine	<0.000313	<0.000313
n-Nitrosodiphenylamine	<0.00051	<0.00051
o-Cresol	<0.000327	<0.000327
Pentachlorophenol	<0.00106	<0.00106

**Table 4**  
**Gulfc0 Former AST Tank Farm**  
**North and South Containment Dike Sample Analytical Results**

Parameter	Dike North	Dike South
<b>SVOCs (cont'd)</b>		
Phenanthrene	<0.000137	<0.000137
Phenol	<0.000325	<0.000325
Pyrene	<0.0000899	<0.0000899
Pyridine	<0.000349	<0.000349
<b>Metals</b>		
Arsenic	0.012	0.024
Barium	1.17	0.49
Cadmium	<0.00019	<0.00019
Calcium	45.4	7.36
Chromium	0.0028 B	0.0031 B
Hardness	192	34.9
Iron	0.6	1.52
Lead	<0.0013	0.0044 B
Manganese	0.034	0.043
Mercury	<0.00004	<0.00004
Selenium	0.0049 B	<0.0046
Silver	<0.0006	<0.0006
<b>TPH (TX 1005)</b>		
>C12-C28	2.5 J	<0.815
>C28-C35	<0.824	<0.815
C6-C12	<0.249	<0.247
Total TPH (C6-C35)	2.5 J	<1.88
<b>Pesticides/Herbicides</b>		
4,4'-DDD	0.00095	0.00021
4,4'-DDE	<0.00000556	0.00004 J
4,4'-DDT	0.00026	0.00027
Aldrin	<0.00000261	0.00000336 J
alpha-BHC	0.0000466	0.0000113 J
alpha-Chlordane	<0.00000274	<0.00000274
beta-BHC	<0.00000424	<0.00000424
delta-BHC	<0.00000232	<0.00000232
Dieldrin	0.0000427 J	<0.00000471
Endosulfan I	0.00022	0.0000508
Endosulfan II	0.00019	0.000043 J
Endosulfan sulfate	0.00095	0.0000878
Endrin	<0.00000832	<0.00000832
Endrin aldehyde	0.00037	<0.00000484
Endrin ketone	0.000053	<0.00000426
gamma-BHC (Lindane)	<0.00000255	<0.00000255
gamma-Chlordane	<0.00000542	<0.00000542
Heptachlor	<0.00000439	<0.00000439
Heptachlor epoxide	<0.00000732	0.0000329
Methoxychlor	<0.00000214	<0.00000214
Toxaphene	<0.000275	<0.000275
2,4,5-T	<0.00015	<0.00015
2,4,5-TP (Silvex)	<0.00013	<0.00013
2,4'-D	<0.00027	<0.00027

**Table 4**  
**Gulfco Former AST Tank Farm**  
**North and South Containment Dike Sample Analytical Results**

Parameter	Dike North	Dike South
<b>PCBs</b>		
Aroclor-1016	<0.000125	<0.000125
Aroclor-1221	<0.000115	<0.000115
Aroclor-1232	<0.0001	<0.0001
Aroclor-1242	<0.000125	<0.000125
Aroclor-1248	<0.000065	<0.000065
Aroclor-1254	<0.000105	<0.000105
Aroclor-1260	<0.00012	<0.00012
<b>TDS/TSS</b>		
Total Dissolved Solids(TDS)	976	973
Total Suspended Solids	15	11

**Notes:**

J = Estimated value for organics.

B = Estimated value for metals.

**Table 5**  
**Gulfco Former AST Tank Farm**  
**Tank Content Projected Quantities**

Tank No.	Description	Projected Quantity <sup>1</sup> (gallons) <sup>2</sup>
Tank No. 2	Organic/Aqueous Mixture Solids - sand, debris (cy)	1,600 10
Tank No. 4	Oily Water	13,000
Tank No. 6	Rust Solids (cy)	106
Tank No. 10	Empty	0
Tank No. 13	Oily sludge	3,000
Tank No. 14	Empty (2 in. of rust solids)	0
Tank No. 15	Oily sludge	40,000
Tank No. 16	Oily sludge	2,500
Tank No. 17	Empty (Minimal rust solids)	0
Tank No. 18	Light Organic Phase	3,000
Tank No. 19	Oily sludge	8,000
Tank No. 21	Oily water	55,500
Tank No. 22	Oily sludge	6,000
Tank No. 23	Appears to be diesel	375
Tank No. 100 <sup>3</sup>	Empty	0
Totals	Liquid (gals) Solids (cy)	132,975 116

**Notes:**

<sup>1</sup> Projected quantity based on CHESI field measurements (12-06) and LTE, 1999 tank volumes.

<sup>2</sup>Quantities are in gallons unless listed otherwise (cy of solids in Tank Nos. 2 and 6).

<sup>3</sup>Tank No. 100 (empty tank) removed by Hurricane Ike storm surge in September 2006.

**Table 6**  
**Gulfco Former AST Tank Farm**  
**Potential Off-site Tank Content Management Facilities**

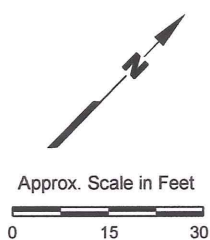
Name	Type	Location	Permit(s)
Clean Harbors Environmental Services	Fuels Blending, Incinerator	Deer Park, Texas	TXD055141378
Waste Management - Coastal Plains	Landfill	Alvin, Texas	MSW Permit # 1721A
Waste Management - Lake Charles	Landfill	Sulphur, Louisiana	LAD000777201

## FIGURES



**Note:**  
 Tank numbers, except 100, from LTE, 1999. Tank 100  
 (empty tank) removed by Hurricane Ike storm surge in  
 September 2008.

Source of photo: H-GAC, Texas aerial photograph, 2006.



**GULFCO MARINE MAINTENANCE**  
 FREEPORT, BRAZORIA COUNTY, TEXAS

Figure 1  
**FORMER AST TANK  
 FARM AREA MAP**

PROJECT: 1352

BY: ZGK

REVISIONS

DATE: DEC., 2009

CHECKED: EFP

**PASTOR, BEHLING & WHEELER, LLC**  
 CONSULTING ENGINEERS AND SCIENTISTS

**APPENDIX B**  
**REMOVAL ACTION PHOTOGRAPHS**



**Photograph 1 – Looking southeast at North Containment during EEI mobilization and setup.  
Holes have been cold-cut in large ASTs to allow access for pumping liquids.**



**Photograph 2 – Looking north along west side of AST Tank Farm – first pumping of  
accumulated water from the containment areas.**



**Photograph 3 – Looking south along east side of east barge slip – pumping water from containment areas into the Intracoastal Waterway.**



**Photograph 4 – Looking south in South Containment following rain event in late-December 2010. South Containment Area water sample was collected beyond blue drum on left side of photograph.**



**Photograph 5 – Accumulated water in footprint of Tank No. 6 following rain event in late-December 2010. One of two North Containment Area water samples was collected from this location.**



**Photograph 6 – Accumulated water in low area around Tank No. 21 (left) and Tank No. 15 (right) following rain event in late-December 2010. The second of two North Containment Area water samples was collected near the upended bottom of Tank No. 21.**



**Photograph 7 – Asbestos inspector collecting sample of the flange gasket on the east end of Tank No. 10.**



**Photograph 8 – Contractors using cutting torch to cut out entire flange on the east end of Tank No. 10 with its gasket containing asbestos.**



**Photograph 9 – Contractors placing flange from east end of Tank No. 10 into a drum for storage and disposal. Flange was wrapped in plastic to secure the gasket while the contractor acquired an over-size drum.**



**Photograph 10 – Pumping liquid wastes from Tank No. 21 into tanker. Note the tanker is staged in temporary containment and tanker vent is connected to a carbon canister (green drum) to collect air vent emissions.**



**Photograph 11 – Pumping liquid wastes from small ASTs located in the South Containment Area.**



**Photograph 12 – Pumping liquid wastes directly from ASTs into tanker staged inside temporary containment.**



**Photograph 13 – Air monitoring performed during pumping activities included periodic checking of the carbon canister exhaust for breakthrough.**



**Photograph 14 – Truck moving loaded tanker out of temporary containment in preparation for transporting to the Clean Harbors facility.**



**Photograph 15 – Looking south – the contractor using hydraulic sheers to open Tank No. 21 to allow access for solidification of tank contents after liquids were removed.**



**Photograph 16 – Looking west – the contractor using hydraulic sheers to open the top of small AST (Tank No. 13) to allow access for solidification of material remaining in the tank.**



**Photograph 17 – Looking west – Tank No. 21 is on the right and Tank No. 15 is on the left. The contractor is adding fly ash to the contents of Tank No. 21 during solidification activities.**



**Photograph 18 – Looking south into Tank No. 6 – the contractor is using the trackhoe to mix fly ash with sludge in Tank No. 6 to facilitate solidification.**



**Photograph 19 – Looking southwest – Tank No. 21 is on the right and Tank No. 15 is on the left. The contractor is using the trackhoe to mix fly ash with the sludge in Tank No. 15 during sludge solidification.**



**Photograph 20 – Looking south – the contractor is using the trackhoe to mix fly ash with sludge in Tank No. 13 located in the South Containment Area.**



**Photograph 21 – Looking west – loading solidified sludge from Tank No. 15 to roll-off boxes.**



**Photograph 22 – Action Resources truck picking up roll-off box loaded with sludge for transport to the Clean Harbors facility.**



**Photograph 23 – Contractor shoveling out the last of the sludge from the bottom of Tank No. 15. Each AST was decontaminated by hand-shoveling the last of the sludge, and at a minimum scraping, brushing and steam-cleaning. Surfactants were used as needed to remove any residual oily film.**



**Photograph 24 – Contractor steam-cleaning the bottom of Tank No. 15 after the last of the sludge was scraped out.**



**Photograph 25 – Contractor decontaminating Tank No. 6 in preparation for demolition.**



**Photograph 26 – One-half of the bottom of Tank No. 21 after it was decontaminated and readied for demolition.**



**Photograph 27 – Contractor using a cutting torch to cut the top off of Tank No. 15 as part of the tank demolition and to allow access for tank decontamination.**



**Photograph 28 – Contractor using the trackhoe to remove the upper portion of Tank No. 15 from the bottom after torch cutting.**



**Photograph 29 – Contractor using the track hoe to demolish small ASTs in the South Containment Area. Demolished and crushed tanks and tank pieces were loaded into scrap boxes (right side of photograph) for transport to the metal recycler.**



**Photograph 30 – Contractor crushing pieces of Tank Nos. 6 and 15 prior to loading pieces into the scrap box (far left).**



**Photograph 31 – Contractor loading one-half of Tank No. 14 into scrap box for transport to the metal recycler. Tank No. 14 is the only tank that was not completely demolished on-site.**



**Photograph 32 – “Air-Mover” with in-line vacuum box used during decontamination of the South Containment Area.**



**Photograph 33 – Contractor using pressure washer (steam cleaner) and air mover to clean and vacuum mud and sediment from concrete in South Containment Area.**



**Photograph 34 – Looking east near northeast corner of South Containment Area after cleaning was complete. Note the network of trenches and clay bottom of the trenches.**



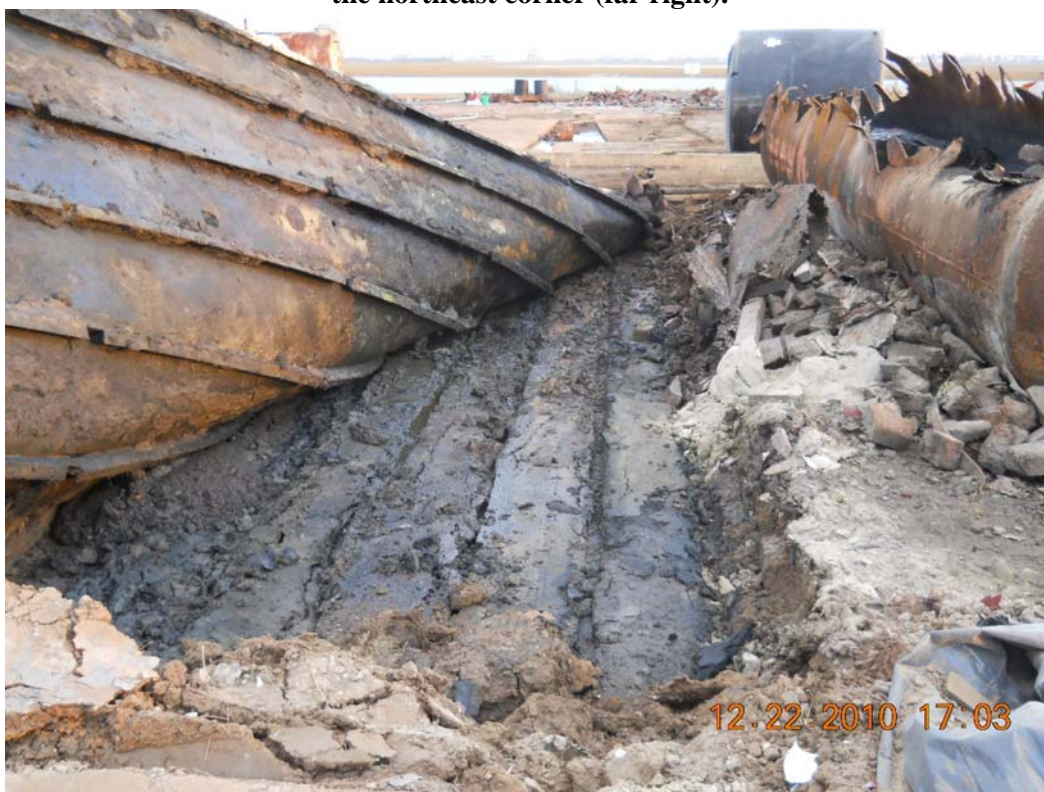
**Photograph 35 – Looking northeast at South Containment Area after the trenches were filled with sandy clay from an off-site quarry.**



**Photograph 36 – Contractor breaching concrete berm of the South Containment Area at the northeast corner of the containment area, after decontamination was complete and trenches backfilled with sandy clay. The water seen here accumulated after all site-work was completed.**



**Photograph 37 – Looking northwest at South Containment Area after accumulated water was drained by breaching the concrete berm in both the northwest corner (on left in the distance) and the northeast corner (far right).**



**Photograph 38 – Looking south at the footprint of Tank No. 6 after the tank was overturned. Floor of containment area beneath the tank was visibly impacted.**



**Photograph 39 – Looking southeast at the Tank Nos. 2 and 6 excavation area. The footprint of Tank No. 2 is on the right and not visibly impacted other than the far south end. Visibly impacted soil can be seen in the south and east walls of the excavation, below a depth of approximately 2.5 feet below ground surface (center and left side of photograph).**



**Photograph 40 – Looking north at the footprints of Tank Nos. 15 and 21 after visibly impacted caliche base had been scraped and stockpiled along the east wall of the containment (right side of photograph). The stockpiled material was loaded into a roll-off box for off-site disposal at the Clean Harbors facility.**



**Photograph 41 – Looking southeast at the Tank Nos. 2 and 6 excavation during backfill with sandy clay. Contractor laid plastic in the excavation prior to backfilling.**



**Photograph 42 – Looking east at the North Containment Area after excavation and scraped areas were backfilled, all debris removed, and containment area graded to drain to the east.**



**Photograph 43 – Contractor breaching concrete berm along east side of North Containment Area. Water seen here, and being released with the breaching of the berm, accumulated after site-work was complete, and confirmation water sample was collected, analyzed and evaluated.**



**Photograph 44 – Looking east – North Containment Area after concrete berm was breached and most of accumulated water had drained.**



**Photograph 45 – Looking southeast at the former AST Tank Farm after site-work was completed – the former AST Tank Farm is in the center of the photograph. The roll-off boxes contain impacted soil awaiting transport to the Clean Harbors facility.**

## **APPENDIX C**

### **TCEQ SURFACE WATER DISCHARGE AUTHORIZATION LETTER**

Bryan W. Shaw, Ph.D., *Chairman*  
Buddy Garcia, *Commissioner*  
Carlos Rubinstein, *Commissioner*  
Mark R. Vickery, P.G., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

July 27, 2010

Mr. Gary Miller  
Superfund Division, Region 6 (6SF-RA)  
Arkansas/Texas Section  
U.S. Environmental Protection Agency  
1445 Ross Avenue, Suite 1200  
Dallas, Texas 75202-2733

Re: Discharge of Accumulated Water within Aboveground Storage Tank Farm Containment Area, Gulfco Marine Maintenance Site, Freeport, Texas

Dear Mr. Miller:

On April 27, 2010, Pastor, Behling & Wheeler, LLC (PBW), on behalf of LDL Coastal Limited LP (LDL), Chromalloy American Corporation (Chromalloy) and The Dow Chemical Company (Dow), submitted an Industrial Wastewater Permit Application Abbreviated Technical Report (report) for discharge of accumulated water within an aboveground storage tank (AST) Tank Farm containment area at the above-referenced Site to the Texas Commission on Environmental Quality (TCEQ), Remediation Division. The accumulated water is to be removed from the containment area as part of a Removal Action at the AST Tank Farm. PBW requested that the TCEQ review the submitted report and develop effluent limitations to assess whether the accumulated water could be discharged to the nearby Intracoastal Waterway. On April 29, 2010, the TCEQ Remediation Division forwarded the report via interoffice memorandum to the Industrial Permits, Wastewater Permit Section.

Based on the report and supplemental information submitted by PBW on May 11, 2010 in response to a TCEQ request, TCEQ Industrial Permits, Wastewater Permits Section technical staff prepared a memorandum dated June 22, 2010 (see Attachment 1). The memorandum provides water quality- and technology-based effluent limitations for certain specific parameters for the requested discharge. The Table 1 (see Attachment 2) compares the effluent limitations from this memorandum to the maximum concentrations of the parameters in four samples collected by PBW from the AST Tank Farm containment area as reported in the Abbreviated Technical Report.

As shown in Table 1, the maximum sample concentrations for all parameters were below all effluent limitations. Based on this evaluation, the TCEQ recommends that the accumulated water within the AST tank farm containment area can be discharged to the Intracoastal Waterway as requested by PBW. It is recommended that pH measurements be collected prior to discharge to verify that pH values for the discharge are within the specified limitations.

Mr. Gary Miller  
Page 2  
July 27, 2010

Thank you for the opportunity to provide this evaluation. Should you have any questions regarding this recommendation or the attached memorandum, please do not hesitate to contact me at (512) 239-6368.

Sincerely,



Ludmila Voskov, P.G., Project Manager  
Superfund Section  
Remediation Division  
Texas Commission on Environmental Quality

LV/sr

Enclosures

cc: Larry Champagne, TCEQ, Remediation Division  
Mr. Eric Pastor - Pastor, Behling & Wheeler, LLC, 2201 Doble Creek Drive,  
Suite 4004, Round Rock, TX 78664

10111004  
SUP 116

# Texas Commission on Environmental Quality

## INTEROFFICE MEMORANDUM

TO: Luda Voskov, Project Manager  
Superfund Section  
Remediation Division (MC 221)

DATE: June 22, 2010

Thru: <sup>YM 6/25/10</sup> Yvonna Miramontes, Team Leader  
Industrial Permits, Wastewater Permits Section (MC 148)

From: Tres Koenings, Permit Writer  
Industrial Permits, Wastewater Permits Section (MC 148)

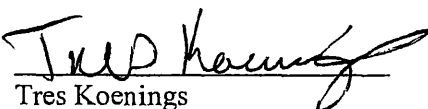
Subject: Gulfco Marine Maintenance Superfund Site

The following is a summary of our review and recommendations based on the Industrial Wastewater Permit Application Technical Report submitted with the Interoffice Memorandum dated on April 29, 2010.

The Gulfco Marine Maintenance Superfund site has no current business activity. The site was previously used for barge cleaning and maintenance. An aboveground storage tank (AST) Tank Farm, consisting of 14 tanks located within two concrete containment areas, is located in the southern part of the site. This area was used for storage of product heels and wash waters associated with barge cleaning operations. The accumulated storm water from the Tank Farm area needs to be removed and discharged prior to removal of the Tank Farm. Constituents of Concern (COC) include chemicals formerly store in the Tank Farm, which were benzene, chloroform, 1,2-dichloroethane, trichloroethylene, tetrachloroethylene, and vinyl chloride.

The discharge route is directly to the Brazos River Tidal via the Gulf Intracoastal Waterway (GIWW) in Segment No. 1201 of the Brazos River Basin. The designated uses and dissolved oxygen criterion as stated in Texas Surface Water Quality Standards (30 TAC Chapter 307.10) for Segment No. 1201 are contact recreation, public water supply, high aquatic life use and 4.0 mg/L dissolved oxygen.

As requested by memorandum, water quality based effluent limitations are provided for this Superfund Site. Attachment 1 provides the effluent limitations necessary for the protection of aquatic life and human health. Regulations promulgated in Title 40 of the Code of Federal Regulations require technology-based limitations be placed in wastewater discharge permits based on effluent limitations guidelines, where applicable, and/or on best professional judgment (BPJ) in the absence of guidelines. Attachment 2 provides technology based limitations for use at your discretion based upon 40 CFR §414 J – Direct Discharge Point Source That Do Not Use End-of-Pipe Biological Treatment.

  
Tres Koenings

June 22, 2010  
Date

**Received**

**JUN 25 2010**

**Superfund Section**

**ATTACHMENT 1****WATER QUALITY BASED EFFLUENT LIMITATIONS**

<b>Parameter</b>	<b>Daily Average</b>	<b>Daily Maximum</b>	<b>Sample Type</b>	<b>Frequency</b>
Flow (MGD)	(Report)	(Report)	Meter	1/week (*1)
Benzene	2.4 mg/L	5.1 mg/L	Grab	1/week (*1)
Chloroform	29.4 mg/L	62.2 mg/L	Grab	1/week (*1)
1,2-dichloroethane	1.6 mg/L	3.5 mg/L	Grab	1/week (*1)
Trichloroethylene	13.9 mg/L	29.5 mg/L	Grab	1/week (*1)
Tetrachloroethylene	7.3 mg/L	15.5 mg/L	Grab	1/week (*1)
Vinyl Chloride	9.5 mg/L	20.0 mg/L	Grab	1/week (*1)
pH (standard units)	(Minimum 6.0)	(Maximum 9.0)	Grab	1/week (*1)

(\*1) When discharge occurs.

**CALCULATION OF WATER QUALITY BASED EFFLUENT LIMITATIONS:**

<b>HUMAN HEALTH</b>						
<b>CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS</b>						
<i>Parameter</i>		<i>SW Fish Only (ug/L)</i>	<i>WLAh</i>	<i>LTah</i>	<i>Daily Avg. (ug/L)</i>	<i>Daily Max. (ug/L)</i>
Benzene		70.8	1770.00	1646.10	2419.77	5119.37
Chloroform		861	21525.00	20018.25	29426.83	62256.76
1,2-Dichloroethane		49.3	1232.50	1146.23	1684.95	3564.76
Tetrachloroethylene		215	5375.00	4998.75	7348.16	15546.11
Trichloroethylene		408	10200.00	9486.00	13944.42	29501.46
Vinyl Chloride		277	6925.00	6440.25	9467.17	20029.18

**ATTACHMENT 2**

**TECHNOLOGY BASED EFFLUENT LIMITATIONS**

<b>Parameter</b>	<b>Daily Average</b>	<b>Daily Maximum</b>	<b>Sample Type</b>	<b>Frequency</b>
Flow (MGD) (*1)	(Report)	(Report)	Meter	1/week (*2)
Benzene (*1)	0.057 mg/L	0.134 mg/L	Grab	1/week (*2)
Chloroform (*1)	0.111 mg/L	0.325 mg/L	Grab	1/week (*2)
1,2-dichloroethane (*1)	0.18 mg/L	0.574 mg/L	Grab	1/week (*2)
Tetrachloroethylene (*1)	0.052 mg/L	0.164 mg/L	Grab	1/week (*2)
Trichloroethylene (*1)	0.026 mg/L	0.069 mg/L	Grab	1/week (*2)
Vinyl Chloride (*1)	0.097 mg/L	0.172 mg/L	Grab	1/week (*2)
pH (standard units) (*1)	(Minimum 6.0)	(Maximum 9.0)	Grab	1/week (*2)

(\*1) These limitations are based upon 40 CFR §414 J – Direct Discharge Point Source That Do Not Use End-of-Pipe Biological Treatment. Technology based limitations are more stringent than the water quality-based limitations and may be used if deemed appropriate by the TCEQ project manager. Flow and pH technology based limitations were the same as water quality-based limitations.

(\*2) When discharge occurs.

## **DEFINITIONS**

1. Daily average flow - the arithmetic average of all determinations of the daily discharge within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily discharge, the determination shall be the arithmetic average of all instantaneous measurements taken during that month.
2. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.
3. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements. When four samples are not available in a calendar month, the arithmetic average of the four most recent measurements or the arithmetic average (weighted by flow) of all values taken during the month shall be used as the daily average concentration.
4. Daily maximum concentration - the maximum concentration measured on a single day, by composite sample unless otherwise specified elsewhere in this permit, within a period of one calendar month.
5. Grab sample - an individual sample collected in less than 15 minutes.

## **OTHER REQUIREMENTS**

The following other requirements are recommended for this discharge:

## **SAMPLING AND LABORATORY TESTING METHODS**

1. All sample collection shall be conducted according to recommendations found in the latest edition of "Standard Methods for the Examination of Water and Wastewater" (prepared and published jointly by the American Public Health Association, the American Waterworks Association, and the Water Pollution Control Federation), or the Environmental Protection Agency manual entitled "Methods for Chemical Analysis of Water and Wastes" (1979), or the Environmental Protection Agency manual entitled "Biological Field and Laboratory Methods for Methods for Measuring the Quality of Surface Waters and Effluents" (1973).
2. Sample containers, holding times, preservation methods and physical, chemical and microbiological and analyses of effluents shall meet the requirements specified in regulations published in the 40 Code of Federal Regulations Part 136 pursuant to the Federal Water Pollution Control Act, Chapter 304(g), and be conducted according to this federal regulation or the latest edition of "Standard Methods for the Examination of Water and Wastewater."
3. Flow measurements, equipment, installation, and procedures shall conform to those prescribed in the "Water Measurement Manual," United States Department of the Interior Bureau of

Reclamation, Washington, D.C., or methods that are equivalent as approved by the executive director.

4. Laboratories shall routinely use and document intra laboratory quality control practices as recommended in the latest edition of the Environmental Protection Agency manual entitled "Handbook for Analytical Quality Control in Water and Wastewater Laboratories." These practices will include the use of internal quality control check samples.
5. The sampling and laboratory facilities, data, and records of quality control are subject to periodic inspection by commission personnel. Should the procedures specified in this section not be suitable to any particular situation, nonstandard sampling and testing techniques may be employed in accordance with the procedures outlined in 30 TAC Chapter 319.12 (relating to Alternative Sampling and Laboratory Testing Methods).
6. The discharge shall not contain floating solids, visible oil or visible foam in other than trace amounts.
7. All laboratory tests performed to demonstrate compliance with the requirements of this authorization must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

**ATTACHMENT 2**

**TABLE 1**

**COMPARISON OF MAXIMUM SAMPLE CONCENTRATIONS TO EFFLUENT LIMITATIONS**

<b>Parameter</b>	<b>Maximum Sample Concentration<sup>1</sup></b>	<b>Water-Quality Based Effluent Limitations<sup>2</sup></b>		<b>Technology-Based Effluent Limitations<sup>2</sup></b>	
		<b>Daily Average</b>	<b>Daily Maximum</b>	<b>Daily Average</b>	<b>Daily Maximum</b>
Benzene	0.015 mg/L	2.4 mg/L	5.1 mg/L	0.057 mg/L	0.134 mg/L
Chloroform	0.095 mg/L	29.4 mg/L	62.2 mg/L	0.111 mg/L	0.325 mg/L
1,2-dichloroethane	0.045 mg/L	1.6 mg/L	3.5 mg/L	0.18 mg/L	0.574 mg/L
Trichloroethylene	0.018 mg/L	13.9 mg/L	29.5 mg/L	0.026 mg/L	0.069 mg/L
Tetrachloroethylene	0.00627 J mg/L	7.3 mg/L	15.5 mg/L	0.052 mg/L	0.164 mg/L
Vinyl Chloride	<0.000765 mg/L	9.5 mg/L	20.0 mg/L	0.097 mg/L	0.172 mg/L
pH (Standard Units)	Not Measured	(Minimum 6.0)	(Maximum 9.0)	(Minimum 6.0)	(Maximum 9.0)

Notes:

<sup>1</sup>Maximum concentration in accumulated water samples collected from containment area. See Table 2 for complete analytical results for these samples.

<sup>2</sup>From Attachment 1 of June 22, 2010 TCEQ Memorandum.

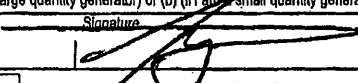
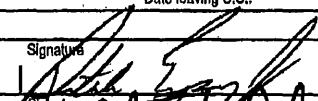
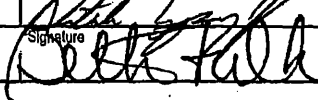
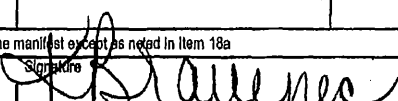
**APPENDIX D**  
**WASTE DISPOSAL MANIFESTS**

## **Liquid Wastes**

TRAILER NO. T-348  
SC PPW 10/26/2010

Form Approved, OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 453-3718</b>	4. Manifest Tracking Number <b>000115092 MWI</b>	
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541 (713) 400-5651</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>				
6. Generator's Phone: <b>(281) 930-2300</b>		6. Transporter 1 Company Name <b>ACTION RESOURCES, INC.</b>		U.S. EPA ID Number <b>ALR00000723</b> <b>TXR0000051508 AC</b>		
7. Transporter 2 Company Name <b>Clean Harbors</b>		U.S. EPA ID Number <b>MA039320250</b>		U.S. EPA ID Number <b>TXD055141378</b>		
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>		Facility's Phone: <b>(281) 930-2300</b>				
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1.	<b>RO. UN1993. WASTE FLAMMABLE LIQUIDS. N.O.S. (WATER). 3, PG III, (BENZENE)</b>	001 TT	4800	G	D001 D015 D022 D028 FNF5119H
	2.					
	3.					
	4.					
14. Special Handling Instructions and Additional Information <b>T. CH4408908 ERG#128</b> <b>TAUKEA # T346</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Officer's Printed/Typed Name <b>Tony Mang</b>		Signature 		Month Day Year <b>11/17/10</b>		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:						
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials					
	Transporter 1 Printed/Typed Name <b>RETUO ESPINOZA JR</b>		Signature 		Month Day Year <b>11/17/10</b>	
Transporter 2 Printed/Typed Name <b>Scott Stalke</b>		Signature 		Month Day Year <b>11/18/10</b>		
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number:						
18b. Alternate Facility (or Generator) U.S. EPA ID Number						
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator)						Month Day Year
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. <b>H040</b>		2.		3.		4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name <b>Jim Bravenec</b>		Signature 		Month Day Year <b>11/18/10</b>		

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

**Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.**

TRUCK # 92

TRAILER # T332

DX3184243

SC PPW 10/26/2010

Form Approved, OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TX P4 90 35 02 39</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115093 MWI</b>								
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>											
Generator's Phone: <b>(713) 400-5651</b>		6. Transporter 1 Company Name <b>EE Action Resources</b>			U.S. EPA ID Number <b>ALR00007237</b> <b>TXR000054508</b>								
7. Transporter 2 Company Name <b>Clean Harbors</b>		U.S. EPA ID Number <b>MTX0039382250</b>			U.S. EPA ID Number <b>TXD055141378</b>								
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>		Facility's Phone: <b>(281) 930-2300</b>											
9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.						
1. <b>X</b>	<b>RO. UN1993. WASTE FLAMMABLE LIQUIDS. N.O.S.. (WATER). 3, PG III, (BENZENE)</b>			<b>001 TT</b>		<b>4800</b>	<b>G</b>						
2.													
3.	<table border="1"> <tr><td>CR</td><td>✓</td></tr> <tr><td>FS</td><td></td></tr> <tr><td>OFFC</td><td></td></tr> </table>			CR	✓	FS		OFFC					
CR	✓												
FS													
OFFC													
4.													
13. Waste Codes <b>D001 D018 D022</b> <b>D028 FNF5119H</b>													
14. Special Handling Instructions and Additional Information <b>1. CH440890B ERG#128</b> <b>TAUKEA T332</b>													
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.													
Generator's/Offshore's Printed/Typed Name <b>LONG MARG</b>				Signature 		Month Day Year <b>11 18 10</b>							
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:													
17. Transporter Acknowledgment of Receipt of Materials													
Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr</b>				Signature 		Month Day Year <b>11 18 10</b>							
Transporter 2 Printed/Typed Name <b>Beth Talke</b>				Signature 		Month Day Year <b>11 18 10</b>							
18. Discrepancy													
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection													
Manifest Reference Number:													
18b. Alternate Facility (or Generator) U.S. EPA ID Number													
Facility's Phone:													
18c. Signature of Alternate Facility (or Generator) Month Day Year													
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)													
1. <b>H040</b>		2.		3.		4.							
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a													
Printed/Typed Name <b>Evelyn Lee</b>				Signature 		Month Day Year <b>11 18 10</b>							

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

TRUCK # 92  
TRAILER # T-514

DX3184243

SC PPW 10/26/2010

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115094 MWI</b>	
5. Generator's Name and Mailing Address <b>LEE CONSULTING 906 Marlin Ave Freeport, TX 77541 (713) 400-5651</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>			
Generator's Phone: <b>(713) 400-5651</b>			U.S. EPA ID Number <b>TXR0000051508</b>			
6. Transporter 1 Company Name <b>Action Response</b>			U.S. EPA ID Number <b>TXR0000051508</b>			
7. Transporter 2 Company Name <b>Clean Harbors</b>			U.S. EPA ID Number <b>TXD055141378</b>			
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 (281) 930-2300</b>			U.S. EPA ID Number <b>TXD055141378</b>			
Facility's Phone: <b>(281) 930-2300</b>						
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
x	1. <b>RD. UN1993. WASTE FLAMMABLE LIQUIDS. N.O.S.. (WATER). 3, PG III, (BENZENE)</b>	601 TT	5000	G	<b>D001 D018 D022 D028 FNF5119H</b>	
	2.					
	3.					
	4.					
14. Special Handling Instructions and Additional Information <b>1. CH440890B ERG#128 TANK # 514</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's Owner's Printed/Typed Name <b>LONG MAA</b>		Signature <i>[Signature]</i>		Month Day Year <b>11/18/10</b>		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name <b>ARTURO ESPINOZA JR.</b>		Signature <i>[Signature]</i>		Month Day Year <b>11/18/10</b>		
Transporter 2 Printed/Typed Name <b>Beth Halka</b>		Signature <i>[Signature]</i>		Month Day Year <b>11/19/10</b>		
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number						
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator) Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. <b>H040</b>		2.		3.		4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name <b>Kim Bravner</b>		Signature <i>[Signature]</i>		Month Day Year <b>11/19/10</b>		

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

TRUCK# 92  
TRAILER# T-351

DX3184243

SC PPW 10/26/2010

Form Approved, OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115095MWI</b>
5. Generator's Name and Mailing Address <b>LDT Coastal LP 906 Marlin Ave Freeport, TX 77541</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>		
Generator's Phone: <b>(713) 400-5851</b>					
6. Transporter 1 Company Name <b>Action Resources</b>			U.S. EPA ID Number <b>TXR000005150870</b>		
7. Transporter 2 Company Name <b>Clean Harbors</b>			U.S. EPA ID Number <b>TXD055141378</b>		
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 207 Independence Parkway South La Porte, TX 77571 (281) 630-2300</b>			U.S. EPA ID Number <b>TXD055141378</b>		
Facility's Phone:					
<b>GENERATOR</b>	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity
			No.	Type	12. Unit Wt./Vol.
	X	1. <b>3. PG III, (BENZENE)</b>	001	TT	5000 G
		2.			
		3.			
		4.			
13. Waste Codes <b>D001 D018 D022 D028 FNF5119H</b>					
14. Special Handling Instructions and Additional Information <b>TRAILER T351</b>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Officer's Printed/Typed Name <b>Long MAA9</b>			Signature 		Month Day Year <b>11/19/10</b>
<b>TRANSPORTER INTL</b>	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Point of entry/exit: Date leaving U.S.:		
	17. Transporter Acknowledgment of Receipt of Materials				
<b>TRANSPORTER</b>	Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr</b>		Signature 		Month Day Year <b>11/19/10</b>
	Transporter 2 Printed/Typed Name <b>Beth Falke</b>		Signature 		Month Day Year <b>11/19/10</b>
<b>DESIGNATED FACILITY</b>	18. Discrepancy				
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection				
	Manifest Reference Number:				
	18b. Alternate Facility (or Generator) U.S. EPA ID Number				
	Facility's Phone:				
18c. Signature of Alternate Facility (or Generator) Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <b>H040</b>		2.		3.	4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a					
Printed/Typed Name <b>Beth Falke</b>			Signature 		Month Day Year <b>11/20/10</b>

TRUCK # 92  
TRAILER # T-332

DX3184243

SC PPW 10/26/2010

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115097MWI</b>
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541</b> Generator's Phone: <b>(713) 400-5651</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>		
6. Transporter 1 Company Name <b>Action Resources</b>			U.S. EPA ID Number <b>TXR0000051508</b>		
7. Transporter 2 Company Name <b>Clean Harbors</b>			U.S. EPA ID Number <b>TXR0000007237</b>		
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b> Facility's Phone: <b>(281) 830-2300</b>			U.S. EPA ID Number <b>TXD055141378</b>		
9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. <b>RO. UN1993. WASTE FLAMMABLE LIQUIDS. N.O.S.. (WATER). 3, PG III, (BENZENE)</b>	001 TT	5000	Gal	D001 D018 D022 D028 FNF5119H
	2.				
	3.				
	4.				
14. Special Handling Instructions and Additional Information <b>1. CH440890B</b> <b>ERG#128</b> <b>TRAILER T332</b>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Officer's Printed/Typed Name <b>Tony Maag</b>		Signature 		Month Day Year <b>11/19/10</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:					
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name <b>Arturo Spinoza Jr.</b>		Signature 		Month Day Year <b>11/19/10</b>	
Transporter 2 Printed/Typed Name <b>Mary Sager</b>		Signature 		Month Day Year <b>11/22/10</b>	
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number					
Facility's Phone:					
18c. Signature of Alternate Facility (or Generator) Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <b>H040</b>		2.		3. 4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a					
Printed/Typed Name <b>Bohrtalk</b>		Signature 		Month Day Year <b>11/22/10</b>	

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

**Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.**

TRUCK # 92  
TRAILER # T346

DX3184243

SC PPW 10/26/2010

Form Approved, OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of 1	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115098 MWI</b>	
5. Generator's Name and Mailing Address <b>LLC Coastal 906 Marlin Ave Freeport, TX 77541 (713) 400-6661</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>			
6. Generator's Phone			U.S. EPA ID Number <b>TXR0000051508</b>			
7. Transporter 1 Company Name <b>Action Resources</b>			U.S. EPA ID Number <b>TXR0000007237</b>			
7. Transporter 2 Company Name <b>Clean Harbors Inc.</b>			U.S. EPA ID Number <b>MA059022250</b>			
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 (281) 930-2300</b>			U.S. EPA ID Number <b>TXD055141378</b>			
Facility's Phone:						
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. <b>RO. UN1993. WASTE FLAMMABLE LIQUIDS. N.O.S.. (WATER). 3, PG III, (BENZENE)</b>	001 TT 5000 G				D001 D018 D022 D028 FNF5119H
	2.					
	3.					
	4.					
	CR					
	FS					
	OFFC					
14. Special Handling Instructions and Additional Information <b>1. CH4408908 ERS#128</b> <b>Trailer # T-346</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's Name Printed/Typed Name <b>Tony MAAQ</b> Signature <b>[Signature]</b> Month Day Year <b>11/22/10</b>						
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr.</b> Signature <b>[Signature]</b> Month Day Year <b>11/22/10</b>						
Transporter 2 Printed/Typed Name <b>JENNIFER KOOB</b> Signature <b>[Signature]</b> Month Day Year <b>11/22/10</b>						
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number						
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator) Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. <b>H040</b> 2. 3. 4.						
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name <b>Julien Lee</b> Signature <b>[Signature]</b> Month Day Year <b>11/22/10</b>						

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX3184243

SC PPW 10/26/2010

TRUCK # 92  
TRAILER # T321

Form Approved, OMB No. 2050-0039

Please print or type. (Form designed for use on ellipse (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TXF490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115100MWI</b>
5. Generator's Mailing Address <b>906 Martin Ave Freeport, TX 77541 (713) 400-5651</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>			
Generator's Phone:		U.S. EPA ID Number <b>TXR0000007237</b>			
6. Transporter 1 Company Name <b>Action Resources</b>		U.S. EPA ID Number <b>TXR0000051504</b>			
7. Transporter 2 Company Name <b>Clean Harbors Inc.</b>		U.S. EPA ID Number <b>MAD03932250</b>			
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 (281) 930-2300</b>		U.S. EPA ID Number <b>TXD055141378</b>			
Facility's Phone:					
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.
x	1. <b>RO. UN1993. WASTE FLAMMABLE LIQUIDS. N.O.S.. (WATER). 3. PG III, (BENZENE)</b>	001 TT 5000 G			
	2.				
	3.				
	4.				
13. Waste Codes <b>D001 D018 D022 D028 FNF5119H</b>					
14. Special Handling Instructions and Additional Information <b>1. CH440890B ERG#128 Trailer 321</b>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Offeror's Printed/Typed Name <b>Larry M. M...</b>		Signature <i>[Signature]</i>		Month <b>11</b>	Day <b>23</b>
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:		Year <b>10</b>	
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr.</b>		Signature <i>[Signature]</i>		Month <b>11</b>	Day <b>23</b>
Transporter 2 Printed/Typed Name <b>Jennifer K...</b>		Signature <i>[Signature]</i>		Month <b>11</b>	Day <b>23</b>
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number					
Facility's Phone:					
18c. Signature of Alternate Facility (or Generator) Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <b>H040</b>		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a					
Printed/Typed Name <b>B. H. H...</b>		Signature <i>[Signature]</i>		Month <b>11</b>	Day <b>24</b>
Year <b>10</b>					

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

TRUCK #92  
# T687

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

**DESIGNATED FACILITY**

DESIGNATED FACILITY'S COPY

N3010. 66L 327563 43440P 57926

DX3199345

DX318443

SC PPW 10/26/2010

TRUCK #92  
TRAILER # T321

Form Approved, OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TX P 4 9 0 3 5 0 2 3 9</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115079MWI</b>
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Martin Ave Freeport, TX 77541 (713) 400-5651</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>			
6. Transporter 1 Company Name <b>Heron Resource</b>		U.S. EPA ID Number <b>ALC000007237</b>			
7. Transporter 2 Company Name <b>Clean Harbor</b>		U.S. EPA ID Number <b>TXD055141378</b>			
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 Facility's Phone: (281) 930-2300</b>		U.S. EPA ID Number <b>TXD055141378</b>			
GENERATOR	9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity EST.
	X	1. <b>RD. UN1993. WASTE FLAMMABLE LIQUIDS, N.O.S. (PETROLEUM OIL), 3, PG III, (BENZENE, TOC &gt; 10%)</b>	001 TT		5000 G
		2.			
		3.			
		4.			
13. Waste Codes <b>D001 D010 D018 D019 FNEA21SH FNEA1H</b>					
14. Special Handling Instructions and Additional Information <b>1. CH4489008 ERG#128</b> → <b>CH4489008 Lennovo W</b> <b>Trailer # 321</b>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Officer's Printed Name <b>Tony Mag</b>		Signature 		Month Day Year <b>12 01 10</b>	
16. International Shipments	<input type="checkbox"/> Import to U.S.	<input type="checkbox"/> Export from U.S.	Port of entry/exit: Date leaving U.S.:		
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed Name <b>ALC000007237</b>		Signature 		Month Day Year <b>12 01 10</b>	
Transporter 2 Printed Name <b>TXD055141378</b>		Signature 		Month Day Year <b>12 02 10</b>	
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection <b>Profile and RCRA changed per generator.</b>					
18b. Alternate Facility (or Generator)		Manifest Reference Number: U.S. EPA ID Number			
Facility's Phone:					
18c. Signature of Alternate Facility (or Generator)		Month Day Year			
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <b>H040</b>	2.	3.	4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a					
Printed Name <b>Kim Browne</b>		Signature 		Month Day Year <b>12 02 10</b>	

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DX3199345  
DX5184243

SC PPW 10/26/2010

TRUCK #92  
TRAILER #T351

Form Approved, OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115101MWI</b>
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541 (713) 400-5651</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>			
6. Transporter 1 Company Name <b>Action Resources</b>		U.S. EPA ID Number <b>TXR000007237</b>			
7. Transporter 2 Company Name <b>Clean Harbor</b>		U.S. EPA ID Number <b>TXR0000051500</b>			
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 Facility's Phone: (281) 930-2300</b>		U.S. EPA ID Number <b>TXD055141378</b>			
GENERATOR	9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity
	<b>x</b>	<b>RO. UN1993. WASTE FLAMMABLE LIQUIDS. N.O.S.. (WATER). 3, PG III, (BENZENE)</b>	<b>000 TT 5000 G</b>		<b>5</b>
14. Special Handling Instructions and Additional Information <b>1. CH440890B ERG#128 Trailer # 514 (351)</b> <b>Frontier 351</b>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Party, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that this waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Officer's Printed/Typed Name <b>Tony Wang</b>		Signature <i>[Signature]</i>		Month Day Year <b>12/01/10</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.					
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr</b>		Signature <i>[Signature]</i>		Month Day Year <b>12/01/10</b>	
Transporter 2 Printed/Typed Name <b>Wang Wang</b>		Signature <i>[Signature]</i>		Month Day Year <b>12/01/10</b>	
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number					
18c. Signature of Alternate Facility (or Generator) Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <b>H040</b>		2.		3.	
				4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a					
Printed/Typed Name <b>R. Bravner</b>		Signature <i>[Signature]</i>		Month Day Year <b>12/03/10</b>	

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX3199345

DX9184243

SC PPW 10/26/2010

TRUCK # 42  
TRAILER # T332

Form Approved, OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115103MWI</b>			
5. Generator's Name and Mailing Address <b>IDL Coastal LP 906 Martin Ave Porter TX 77541 Phone: (713) 400-5651</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>					
6. Transporter 1 Company Name <b>Action Resources</b>			U.S. EPA ID Number <b>TXR000051508</b>					
7. Transporter 2 Company Name <b>Clean Harbors</b>			U.S. EPA ID Number <b>TXD055141378</b>					
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 Facility's Phone: (281) 930-2300</b>			U.S. EPA ID Number <b>TXD055141378</b>					
GENERATOR	9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
	X	1. <b>RO, UN1993, WASTE FLAMMABLE LIQUIDS, N.O.S., (WATER). 3. PG III, (BENZENE)</b>	001 TT 50006				D001 D018 D022 D028 FNF5119H	
		2.						
		3.						
		4.						
14. Special Handling Instructions and Additional Information <b>1. CH440890B ERG#128</b> <b>Trailer 332</b>								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(e) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Officer's Printed/Typed Name <b>Tony Whagg</b>		Signature 		Month Day Year <b>12 2 10</b>				
TRANSPORTER INTL.	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:					
	Transporter signature (for exports only):							
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials		Signature		Month Day Year			
	Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr</b>				<b>12 2 10</b>			
DESIGNATED FACILITY	Transporter 2 Printed/Typed Name <b>Benita</b>		Signature 		Month Day Year <b>12 3 10</b>			
	18. Discrepancy							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
Manifest Reference Number:								
18b. Alternate Facility (or Generator) U.S. EPA ID Number								
Facility's Phone:								
18c. Signature of Alternate Facility (or Generator) Month Day Year								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. <b>H040</b>		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name <b>Kim Bravener</b>		Signature 		Month Day Year <b>12 10 10</b>				

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX 3184443 DX 3199315 TRUCK # 92  
DX 3184444 SC PPW 10/26/2010 TRAILER # T 514

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115084MWI</b>		
5. Generator's Name and Mailing Address <b>LUL Coastal LP 906 Marlin Ave Freeport, TX 77541</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>				
Generator's Phone: <b>(713) 400-5651</b>							
6. Transporter 1 Company Name <b>Action Resources</b>			U.S. EPA ID Number <b>A4R000007237</b>				
7. Transporter 2 Company Name <b>Clean Harbors</b>			U.S. EPA ID Number <b>TXD055141378</b>				
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>			U.S. EPA ID Number <b>TXD055141378</b>				
Facility's Phone: <b>(281) 930-2300</b>							
9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type		11. Total Quantity	12. Unit WL/Vol.	13. Waste Codes
X	1. <b>RO. W1993. WASTE FLAMMABLE LIQUIDS. N.O.S. (PETROLEUM OIL), 3, PG III, (BENZENE, 100-10%) WATER</b>		001 TT 5000 G		5		<b>D022 D028 D001 D014 D018 D016 FNF421DN FNF5191F</b>
	2.						
	3.						
	4.						
14. Special Handling Instructions and Additional Information <b>1. CH440890B</b> <b>ERG#128</b> <b>CH440890B</b> <b>Trailer No. 514</b>							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Officer's Printed/Typed Name <b>Tony Maag</b>			Signature 		Month Day Year <b>12 07 10</b>		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Data leaving U.S.:							
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name <b>Arturo Spinoza Jr</b>			Signature 		Month Day Year <b>12 07 10</b>		
Transporter 2 Printed/Typed Name <b>Arturo Spinoza Jr</b>			Signature 		Month Day Year <b>12 07 10</b>		
18. Discrepancy							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number							
Facility's Phone:							
18c. Signature of Alternate Facility (or Generator) Month Day Year							
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1. <b>H040</b>		2.		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name <b>R. Bravener</b>			Signature 		Month Day Year <b>12 08 10</b>		

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX3199345

TRUCK #92

DX9184414

SCPPW 10/26/2010

TRAILER #687

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TX P 4 9 0 3 5 0 2 3 9</b>		2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>		4. Manifest Tracking Number <b>000115087 MWI</b>							
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Martin Ave Freeport, TX 77541 Generator's Phone: (713) 400-5651</b>				Generator's Site Address (If different than mailing address) <b>SAME</b>										
6. Transporter 1 Company Name <b>Action Resources</b>				U.S. EPA ID Number <b>ALR000007237</b>										
7. Transporter 2 Company Name <b>Clean Harbors Deer Park, LLC</b>				U.S. EPA ID Number <b>TXD055141378</b>										
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 Facility's Phone: (281) 930-2300</b>				U.S. EPA ID Number <b>TXD055141378</b>										
GENERATOR	9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes					
					No.	Type								
	X	1. <b>RO. UN1993. WASTE FLAMMABLE LIQUIDS. N.O.S. (PETROLEUM OIL), 3. PG III. (BENZENE, TOC &gt; 10%) (WATER)</b>			001	TT	4500	G	<b>D001 D010 D018</b>					
		3. <table border="1"><tr><td>CR</td><td></td></tr><tr><td>FS</td><td>✓</td></tr><tr><td>OFFC</td><td></td></tr></table>			CR		FS	✓	OFFC					
CR														
FS	✓													
OFFC														
		4. <table border="1"><tr><td>CR</td><td></td></tr><tr><td>FS</td><td>✓</td></tr><tr><td>OFFC</td><td></td></tr></table>			CR		FS	✓	OFFC					
CR														
FS	✓													
OFFC														
14. Special Handling Instructions and Additional Information <b>1. CH440890B ERG#128</b> <b>CH440890B</b>														
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.														
Generator's/Officer's Printed/Typed Name <b>Tony MARR</b>				Signature 		Month Day Year <b>12/15/10</b>								
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Part of entry/exit: Date leaving U.S.:														
17. Transporter Acknowledgment of Receipt of Materials														
Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr</b>				Signature 		Month Day Year <b>12/15/10</b>								
Transporter 2 Printed/Typed Name <b>Jonathan Ford</b>				Signature 		Month Day Year <b>12/15/10</b>								
18. Discrepancy														
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection														
Manifest Reference Number:														
18b. Alternate Facility (or Generator) U.S. EPA ID Number														
Facility's Phone:														
18c. Signature of Alternate Facility (or Generator) Month Day Year														
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)														
1. <b>H040</b>			2.			3.								
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a														
Printed/Typed Name <b>Elizabeth Lee</b>				Signature 		Month Day Year <b>12/20/10</b>								

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DN3275541

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone 1 979-329-1200	4. Manifest Tracking Number 001370022 GBF
5. Generator's Name and Mailing Address LPL COASTAL LP/GULF CO 906 MARLIN AVE FREEPORT, TX 77541					
Generator's Site Address (if different than mailing address) SAME					
6. Transporter 1 Company Name ACTION RESOURCES				U.S. EPA ID Number AKR000007237	
7. Transporter 2 Company Name Climax Hazardous Waste				U.S. EPA ID Number MD05032250	
8. Designated Facility Name and Site Address CLIMAX HAZARDOUS WASTE PARK LLC 2027 INDEPENDENCE PKWY S. DEER PARK, TX 77571					
Facility's Phone: TX055141378					
GENERATOR	9a. HM:	9b. U.S. DOT Description (including proper shipping name, hazard class, ID number, and packing group (if any))	10. Containers No. Type	11. Total Quantity	12. Unit Wt/Vol
		1. RQ, UN1993 WASTE FLAMMABLE liquids nos (WATER) 3, PG III (BENZENE)	001 TT	5000 G	
13. Waste Codes D001 D018 D022 D029 F015 F119 F					
14. Special Handling Instructions and Additional Information CH440890 B ERG 12B T687					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(e) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Officer's Printed/Typed Name Tony MAAG					
Signature 					
Month Day Year 01 27 11					
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:				
	17. Transporter Acknowledgment of Receipt of Materials				
Transporter 1 Printed/Typed Name MATT SANCHEZ					
Signature 					
Month Day Year 11 27 11					
Transporter 2 Printed/Typed Name JENNIFER KOLB					
Signature 					
Month Day Year 02 07 11					
DESIGNATED FACILITY	18. Discrepancy				
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection				
	Manifest Reference Number:				
	U.S. EPA ID Number				
	18b. Alternate Facility (or Generator)				
Facility's Phone:					
18c. Signature of Alternate Facility (or Generator)					
Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. H040 2. 3. 4.					
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest as noted in item 18a					
Printed/Typed Name Kim Brannen					
Signature 					
Month Day Year 01 28 11					

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

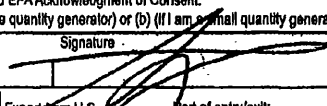
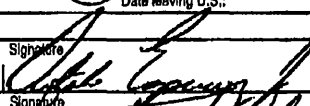

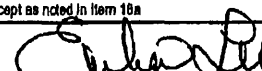
DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DX3275541

SC PPW 10/26/2010

Form Approved. OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TX P 4 9 0 3 5 0 2 3 9</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107697MWI</b>	
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Martin Ave Freeport, TX 77541</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>			
Generator's Phone: <b>(713) 400-5651</b>						
6. Transporter 1 Company Name <b>Action Resources</b>			U.S. EPA ID Number <b>ALR00007237</b>			
7. Transporter 2 Company Name <b>Clean Harbors</b>			U.S. EPA ID Number <b>TXD055141378</b>			
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>			U.S. EPA ID Number <b>TXD055141378</b>			
Facility's Phone: <b>(281) 930-2300</b>						
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
			No. Type			
	<b>X</b>	<b>RO. UN1993. WASTE FLAMMABLE LIQUIDS. N.O.S.. (WATER). 3. PG III, (BENZENE)</b>	<b>001 TT</b>	<b>5000</b>	<b>G</b>	<b>D001 D018 D022 D028 FNF5119H</b>
14. Special Handling Instructions and Additional Information <b>1. CH440b90B ERG#128</b>  <b>TANKER 687</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Officer's Printed/Typed Name <b>Tony Marr</b>			Signature 		Month Day Year <b>1 6 11</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name <b>ARREK SPINOZA JR</b>			Signature 		Month Day Year <b>01 06 11</b>	
Transporter 2 Printed/Typed Name <b>Beeth Faller</b>			Signature 		Month Day Year <b>1 6 11</b>	
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number:						
18b. Alternate Facility (or Generator) U.S. EPA ID Number						
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator) Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. <b>H040</b>		2.	3.	4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name <b>Ervin Lee</b>			Signature 		Month Day Year <b>11 7 11</b>	

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.



*Solidify*  
NON-HAZARDOUS  
WASTE MANIFEST

FOR OFFICE USE ONLY

Customer Acc. No. \_\_\_\_\_  
Ticket No. \_\_\_\_\_

GENERATOR

WMI 733174

Name LDL Coastal LP (Gulfco)  
Address c/o Columbia Environmental Services, Inc.  
13222 Reeveston Rd, Houston, TX 77039  
Phone No. 713 868 4845

Generating Location 906 Marlin Avenue  
Fresport, TX 7754  
State Gen. ID No. TXD490350239  
Gen. US EPA ID No. 303X12

WASTE CODE	PROFILE NUMBER	WASTE DESCRIPTION	QUANTITY	UNITS
FNF61192	116678TX	Non Hazardous Liquids, NA, Class 2	2300	Gal

CODES: D = DRUM; B = BAG; C = CARTON; P = POUND; Y = YARDS; O = OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

*Clint Lechner*

AUTHORIZED AGENT'S NAME (PRINT)

11-17-10  
DATE

*Clint Lechner*  
SIGNATURE

TRANSPORTER

Transporter's Name Action Resources  
Address 5001 W. Linnwood  
Pasadena TX 77507

Phone No. 281 930 4848  
Driver's name Arturo Espinoza Jr.  
Vehicle No. 92

I hereby certify that the above listed material was picked up at the Generator site listed above and delivered without incident to the disposal facility listed below.

11-17-10  
SHIPMENT DATE

*Arturo Espinoza Jr.*  
DRIVER'S SIGNATURE

11-17-10  
DELIVERY DATE

*Arturo Espinoza Jr.*  
DRIVER'S SIGNATURE

DISPOSAL FACILITY

Site Name WMI - Coastal Plains  
Address 21000 E. Hwy 6, Alvin, TX 77511  
Permit No. 1721A

Phone No. 281-388-1708  
Time \_\_\_\_\_

I hereby certify that the above listed material has been accepted and that information presented on this document is true and accurate.

*Cleandro*  
NAME

(PRINT)

11-17-2010  
DATE

*Cleandro*  
SIGNATURE

DX318444

TRUCK # 92  
TRAILER # T332

DX318444

SCPPW 10/26/2010

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of 1 <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115083MWI</b>
5. Generator's Name and Mailing Address <b>LDL CAPITAL LP 906 Marlin Ave Freeport, TX 77541 Generator's Phone: (713) 400-5651</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>		
6. Transporter 1 Company Name <b>Action Resources</b>			U.S. EPA ID Number <b>AKR000007237</b>		
7. Transporter 2 Company Name <b>Clean Harbors Inc.</b>			U.S. EPA ID Number <b>MTD039320000</b>		
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 Facility's Phone: (281) 930-2300</b>			U.S. EPA ID Number <b>TXD055141378</b>		
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit WL/Vol.
1. X	<b>RO UN1993. WASTE FLAMMABLE LIQUIDS. N.O.S. (PETROLEUM OIL), 3, PG III, (BENZENE, TOC &gt; 10%)</b>	<b>001 TT</b>		<b>4000</b>	<b>GS</b>
13. Waste Codes <b>D001 D010 D018 D019 FNF4219H</b>					
14. Special Handling Instructions and Additional Information <b>1. CH440809B ERG#128</b> <b>Trailer 332</b>					
15. GENERATOR'S/SPRINGER'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Officer's Printed/Typed Name <b>Tommy Maa</b>		Signature 		Month Day Year <b>11 29 10</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:					
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr.</b>		Signature 		Month Day Year <b>11 29 10</b>	
Transporter 2 Printed/Typed Name <b>JENNIFER KOLB</b>		Signature 		Month Day Year <b>11 29 10</b>	
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number					
Facility's Phone:					
18c. Signature of Alternate Facility (or Generator) Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <b>H040</b>		2.		3. 4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a					
Printed/Typed Name <b>Kim Braune</b>		Signature 		Month Day Year <b>11 30 10</b>	

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

Form Approved, OMB No. 2050-0038

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

**Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.**

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DX3184443

SC PPW 10/26/2010

TRUCK # 92  
TRAILER # T-346  
Form Approved, OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number TXP490350239	2. Page 1 of 1	3. Emergency Response Phone (800) 483-3718	4. Manifest Tracking Number 000115077MWI		
5. Generator's Name and Mailing Address LDL Coastal LP 906 Martin Ave Freeport, TX 77541 Generator's Phone: (713) 400-5651			Generator's Site Address (if different than mailing address) SAME				
6. Transporter 1 Company Name Heron Resources			U.S. EPA ID Number ALR00007237				
7. Transporter 2 Company Name Clean Harbors			U.S. EPA ID Number TXD055141378				
8. Designated Facility Name and Site Address Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 Facility's Phone: (281) 830-2300			U.S. EPA ID Number TXD055141378				
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	X	1. RO. UN1993. WASTE FLAMMABLE LIQUIDS, N.O.S. (PETROLEUM OIL), 3, PG III, (BENZENE, TOC > 10%)	001 TT 5000 G		6		D001 D010 D018 D019 FNF4219H
		2.					
		3.					
		4.					
14. Special Handling Instructions and Additional Information 1. CH440909B ERG#128 TRAILER # 346							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's Official Printed Name Tony Mraz		Signature [Signature]		Month Day Year 11/30/10			
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:					
17. Transporter Acknowledgment of Receipt of Materials		Signature [Signature]					
Transporter 1 Printed Name Heron Resources		Month Day Year 11/30/10					
Transporter 2 Printed Name Clean Harbors		Month Day Year 12/01/10					
18. Discrepancy							
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input checked="" type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
Receiving 225 lbs Huel to Generator							
18b. Alternate Facility (or Generator) Manifest Reference Number: 0026904347LE U.S. EPA ID Number							
18c. Signature of Alternate Facility (or Generator) Month Day Year							
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1. H040 2. 3. 4.							
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest process as noted in Item 18a							
Signature [Signature] Month Day Year 12/01/10							
DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)							

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

## **Solid Wastes**

DX3242272

DX3184543

SC PPW 10/26/2010

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on ellipse (12-pitch) typewriter.)

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TX P 4 9 0 3 5 0 2 3 9</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115120 MWI</b>	
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>			
Generator's Phone: <b>(713) 400-5651</b>						
6. Transporter 1 Company Name <b>Clean Harbors Environmental Services Inc.</b>			U.S. EPA ID Number <b>MA0000007237</b>			
7. Transporter 2 Company Name <b>Clean Harbors</b>			U.S. EPA ID Number <b>MA003322250</b>			
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>			U.S. EPA ID Number <b>TXD055141378</b>			
Facility's Phone: <b>(281) 930-2300</b>						
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.
		1. <b>NA3077. HAZARDOUS WASTE. SOLID. N.O.S.. (SOIL &amp; RUST SCALE), 9, PG III. (BENZENE, CHLOROFORM)</b>	<b>001 CM 15 CY</b>			
		2.				
		3.				
		4.				
13. Waste Codes <b>D018 D022 D028 D039 FNF8319H</b>						
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171</b> <b>Box # 2237</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Officer's Printed Name <b>Tony Maza</b>			Signature 		Month Day Year <b>12/14/10</b>	
TRANSPORTER INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:			
	Transporter signature (for exports only):					
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials		Signature		Month Day Year	
	Transporter 1 Printed/Typed Name <b>ARRURO ESPINOZA Sa</b>				<b>12/14/10</b>	
DESIGNATED FACILITY	Transporter 2 Printed/Typed Name <b>Ben Faltu</b>		Signature 		Month Day Year <b>12/14/10</b>	
	18. Discrepancy					
DESIGNATED FACILITY	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
	Manifest Reference Number:					
	18b. Alternate Facility (or Generator) U.S. EPA ID Number					
	Facility's Phone:					
DESIGNATED FACILITY	18c. Signature of Alternate Facility (or Generator)					Month Day Year
	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
	1. <b>H040</b>	2.	3.	4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a						
Printed/Typed Name <b>Edwin Lee</b>			Signature 		Month Day Year <b>12/18/10</b>	

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

TRUCK # 92  
TRAILER # 747

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DX3184513

SCPPW 10/26/2010

Form Approved. OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115119MWI</b>			
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>					
Generator's Phone: <b>(713) 400-5651</b>								
6. Transporter 1 Company Name <b>Clean Harbors Environmental Services Inc - Action Resources</b>			U.S. EPA ID Number <b>AKR000007237</b>					
7. Transporter 2 Company Name <b>Clean Harbors</b>			U.S. EPA ID Number <b>MA003322250</b>					
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>			U.S. EPA ID Number <b>TXD055141378</b>					
Facility's Phone: <b>(281) 930-2300</b>								
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit WL/Vol.	13. Waste Codes	
	x	1. <b>NA3077. HAZARDOUS WASTE. SOLID. N.O.S. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>	001 CM 15 CY				D018 D022 D029	
		2.					D039 FNF83L9H	
		3. CR						
		4. OFFC						
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171</b> <b>TRAILER/BOX # N23486</b>								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Officer's Printed/Typed Name <b>Tony Masse</b>								
Signature <i>[Signature]</i>								
Month Day Year <b>12/14/10</b>								
INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____							
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials							
	Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr</b>							
DESIGNATED FACILITY	Transporter 2 Printed/Typed Name <b>Beth Talke</b>							
	Signature <i>[Signature]</i>							
Month Day Year <b>12/14/10</b>								
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
18b. Alternate Facility (or Generator) Manifest Reference Number: _____ U.S. EPA ID Number _____								
Facility's Phone: _____								
18c. Signature of Alternate Facility (or Generator) _____ Month Day Year _____								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. <b>H040</b> 2. _____ 3. _____ 4. _____								
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name <b>Evelyn Lee</b>								
Signature <i>[Signature]</i>								
Month Day Year <b>12/18/10</b>								

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DX3242272

DX3184513

SCPPW 10/26/2010

TRUCK # 92  
TRAILER # 1747

Form Approved. OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115066MWI</b>
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Martin Ave Freeport, TX 77541</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>		
Generator's Phone: <b>(713) 400-5651</b>					
6. Transporter 1 Company Name <b>Clean Harbors Environmental Services Inc</b>			U.S. EPA ID Number <b>TXD000007237</b>		
7. Transporter 2 Company Name <b>Clean Harbors Env Serv</b>			U.S. EPA ID Number <b>TXD034322200</b>		
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>			U.S. EPA ID Number <b>TXD055141378</b>		
Facility's Phone: <b>(281) 930-2300</b>					
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.
x	1. <b>HA3077. HAZARDOUS WASTE. SOLID. N.O.S. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>	001	cm	15	cy
	2.				
	3.				
	4.				
	CR				
	FS				
	OFFC				
13. Waste Codes <b>D018 D022 D028</b> <b>D039 FNF8319H</b>					
14. Special Handling Instructions and Additional Information <b>1. CH440902B</b> <b>ERG#171</b> <b>Box RBL250515</b>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Offor's Printed/Typed Name <b>Tony M...</b>		Signature <i>[Signature]</i>		Month Day Year <b>12 15 10</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:					
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name <b>ARTURO ESPINOZA JR</b>		Signature <i>[Signature]</i>		Month Day Year <b>12 15 10</b>	
Transporter 2 Printed/Typed Name <b>[Signature]</b>		Signature <i>[Signature]</i>		Month Day Year <b>12 15 10</b>	
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
Manifest Reference Number:					
18b. Alternate Facility (or Generator) U.S. EPA ID Number					
Facility's Phone:					
18c. Signature of Alternate Facility (or Generator) Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <b>H040</b>		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a					
Printed/Typed Name <b>Brynn Lee</b>		Signature <i>[Signature]</i>		Month Day Year <b>12 15 10</b>	

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

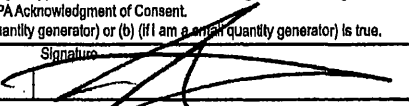
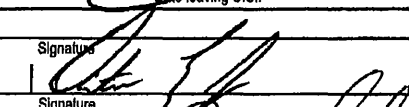
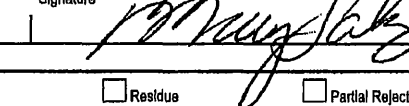
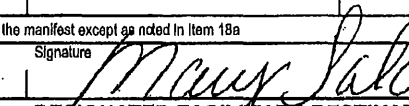
Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DX3184513

SCPPW 10/26/2010

Form Approved. OMB No. 2050-0039

TRK # 92  
TRLR # 747

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TX P 4 9 0 3 5 0 2 3 9</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115067MWI</b>
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Martin Ave Freeport, TX 77541 Generator's Phone: (713) 400-5651</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>		
6. Transporter 1 Company Name <b>Clean Harbors Environmental Services Inc</b>			U.S. EPA ID Number <b>AL2000007251</b>		
7. Transporter 2 Company Name <b>Clean Harbors</b>			U.S. EPA ID Number <b>MAD038222250</b>		
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 Facility's Phone: (281) 930-2300</b>			U.S. EPA ID Number <b>TXD055141378</b>		
9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity
			No. Type		12. Unit Wt./Vol.
	1. <b>NA3077. HAZARDOUS WASTE. SOLID. N.O.S.. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>		001 CM 15		CY
	2.				
	3.				
				13. Waste Codes	
				D018 D022 D028 D039 FNF8319H	
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171</b> <b>BOX RBN 280445</b>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Offeror's Printed/Typed Name <b>Louie Mame</b>			Signature 		Month Day Year <b>12 15 10</b>
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____					
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr</b>			Signature 		Month Day Year <b>12 15 10</b>
Transporter 2 Printed/Typed Name <b>Mary Salazar</b>			Signature 		Month Day Year <b>12 15 10</b>
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
18b. Alternate Facility (or Generator) Manifest Reference Number: _____ U.S. EPA ID Number _____					
Facility's Phone: _____					
18c. Signature of Alternate Facility (or Generator) _____ Month Day Year _____					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <b>H040</b>		2. _____		3. _____	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a					
Printed/Typed Name <b>Mary Salazar</b>			Signature 		Month Day Year <b>12 15 10</b>

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX3842272

BX3184513

SCPPW 10/26/2010

TRCK # 72

TR LR # 747

Form Approved, OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115068 MWI</b>	
5. Generator Name and Mailing Address <b>Clean Harbors Inc. 906 Marlin Ave Freeport, TX 77541 (713) 400-5651</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>			
6. Generator's Phone: <b>(713) 400-5651</b>			U.S. EPA ID Number <b>TXD055141378</b>			
6. Transporter 1 Company Name <b>Clean Harbors Environmental Services Inc.</b>			U.S. EPA ID Number <b>MA000007237</b>			
7. Transporter 2 Company Name <b>Clean Harbors Env. Svc.</b>			U.S. EPA ID Number <b>MA0039322250</b>			
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 (281) 930-2300</b>			U.S. EPA ID Number <b>TXD055141378</b>			
Facility's Phone: <b>(281) 930-2300</b>						
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.
x	1. <b>HA3077, HAZARDOUS WASTE, SOLID, N.O.S. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>		001 CM		15	CY
	2.					
	3.					
	4.					
13. Waste Codes <b>D018 D022 D028</b> <b>D039 FNF83L9H</b>						
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171</b> <b>Box # 1B26606</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/piccarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Officer's Printed/Typed Name <b>Tony Mang</b>			Signature 		Month Day Year <b>12 16 10</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name <b>ARTURO J. SPINOSA JR</b>			Signature 		Month Day Year <b>12 16 10</b>	
Transporter 2 Printed/Typed Name <b>JENNIFER KELL</b>			Signature 		Month Day Year <b>12 16 10</b>	
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number						
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator) Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. <b>H040</b>		2.		3.		4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a						
Printed/Typed Name <b>JENNIFER KELL</b>			Signature 		Month Day Year <b>12 16 10</b>	

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

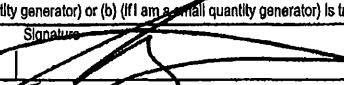
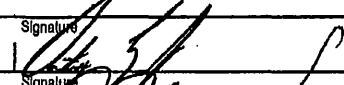
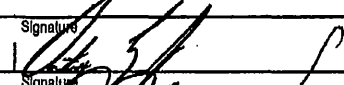
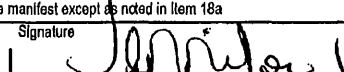
Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DX3184513

SC PPW 10/26/2010

Form Approved. OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115069MWI</b>			
5. Generator's Name and Mailing Address <b>LDL Coastal LP</b> <b>906 Marlin Ave</b> <b>Freeport, TX 77541</b> Generator's Phone: <b>(713) 400-5651</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>					
6. Transporter 1 Company Name <b>Clean Harbors Environmental Services Inc</b>			U.S. EPA ID Number <b>ALR000001231</b>					
7. Transporter 2 Company Name <b>Clean Harbors</b>			U.S. EPA ID Number <b>TXD055141378</b>					
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC</b> <b>2027 Independence Parkway South</b> <b>La Porte, TX 77571</b> Facility's Phone: <b>(281) 930-2300</b>			U.S. EPA ID Number <b>TXD055141378</b>					
9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
x	1. <b>HA3077, HAZARDOUS WASTE, SOLID, N.O.S., (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>		001 CM 15 CY				D018 D022 D028	
	2.						D038 FNF83 L9H	
	3.							
	4.							
14. Special Handling Instructions and Additional Information <b>1. CH440902B</b> <b>ERG#171</b> <b>Box # NI6822</b>								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Officer's Printed/Typed Name <b>Tony Marr</b>			Signature 			Month Day Year <b>12 16 10</b>		
16. International Shipment: <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name <b>Arturo Hernandez Jr</b>			Signature 			Month Day Year <b>12 16 10</b>		
Transporter 2 Printed/Typed Name <b>Maya Sub</b>			Signature 			Month Day Year <b>12 16 10</b>		
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
18b. Alternate Facility (or Generator) Manifest Reference Number: _____ U.S. EPA ID Number _____								
Facility's Phone: _____								
18c. Signature of Alternate Facility (or Generator) _____ Month Day Year _____								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. <b>H040</b>		2. _____		3. _____		4. _____		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name <b>Jennica Kello</b>			Signature 			Month Day Year <b>12 18 10</b>		

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX3184513

5C PPW 10/26/2010

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on ellipse (12-pitch) typewriter.)

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115070MWI</b>
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541 7131-400-6651</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>			
6. Transporter 1 Company Name <b>Clean Harbors Environmental Services Inc.</b>		U.S. EPA ID Number <b>ALC000007257</b>		MAD059324250	
7. Transporter 2 Company Name <b>Clean Harbors Environmental Services Inc.</b>		U.S. EPA ID Number <b>MAD059324250</b>		TXD055141378	
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 (281) 930-2300</b>		U.S. EPA ID Number <b>TXD055141378</b>			
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.
x	1. <b>NA3077. HAZARDOUS WASTE. SOLID. N.O.S. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>	001	CM	15	cy
	2.				
	3.				
	4.				
13. Waste Codes <b>D018 D022 D028 D039 FNF83L9H</b>					
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171</b> <b>Box # N-26538</b>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(e) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Officer's Printed/Typed Name <b>Tony Marras</b>		Signature 		Month Day Year <b>12/17/10</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:			
17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name <b>Armando Esquivias Jr.</b>		Signature 		Month Day Year <b>12/17/10</b>	
Transporter 2 Printed/Typed Name <b>JENNIFER KELL</b>		Signature 		Month Day Year <b>12/18/10</b>	
18. Discrepancy 18a. Discrepancy Indication Specie <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number:					
18b. Alternate Facility (or Generator) U.S. EPA ID Number					
18c. Signature of Alternate Facility (or Generator) Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. <b>H040</b> 2. 3. 4.					
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name <b>Julian Lee</b>					
Signature 		Month Day Year <b>12/20/10</b>			

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

Please print or type. (Form designed for use on ellipse (12-pitch) typewriter.)

DX3184513

SC PPW 10/26/2010

Form Approved, OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115071 MWI</b>	
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport TX 77541</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>				
Generator's Phone: <b>(713) 400-5651</b>						
8. Transporter 1 Company Name <b>Clean Harbors Environmental Services Inc</b>		U.S. EPA ID Number <b>TXD000007237</b>		U.S. EPA ID Number <b>MAD039322250</b>		
7. Transporter 2 Company Name <b>Clean Harbor</b>		U.S. EPA ID Number <b>TXD034322250</b>				
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>		U.S. EPA ID Number <b>TXD055141378</b>				
Facility's Phone: <b>(281) 930-2300</b>						
9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. <b>NA3077. HAZARDOUS WASTE. SOLID. N.O.S., (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>	001 CM 15 CY				D018 D022 D028 D039 FNF83L9H
	2.					
	3.					
	4.					
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171</b> <b>Box # 48861</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's Name/Typed Name <b>Tony Maza</b>		Signature 		Month Day Year <b>12/17/10</b>		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:				
17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name <b>Harold Espinoza Jr.</b>		Signature 		Month Day Year <b>12/17/10</b>		
Transporter 2 Printed/Typed Name <b>Wally Sabzer</b>		Signature 		Month Day Year <b>12/18/10</b>		
18. Discrepancy 18a. Discrepancy Indication: Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number:						
18b. Alternate Facility (or Generator) Facility's Phone: 18c. Signature of Alternate Facility (or Generator)						
Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. <b>H040</b>		2.		3.		4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 19a Printed/Typed Name <b>Cheryl Lee</b>						
Signature 		Month Day Year <b>12/20/10</b>				

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

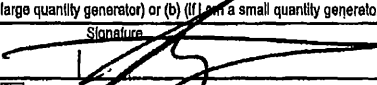
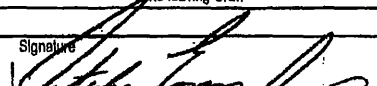
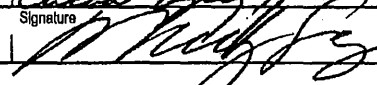
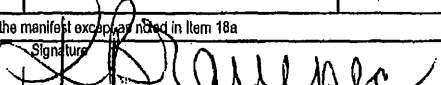
Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

Please print or type. (Form designed for use on ellipse (12-pitch) typewriter.)

DX3194513

SC PPW 10/26/2010

Form Approved, OMS No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115075 MWI</b>	
5. Generator's Name and Mailing Address <b>LDI Coastal LP 906 Martin Ave Freeport, TX 77541</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>				
Generator's Phone <b>(713) 400-5651</b>		U.S. EPA ID Number <b>ALR000007237</b>				
6. Transporter 1 Company Name <b>Clean Harbors Environmental Services Inc</b>		U.S. EPA ID Number <b>MA0039322250</b>				
7. Transporter 2 Company Name <b>Clean Harbors</b>		U.S. EPA ID Number <b>TXD055141378</b>				
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>		Facility's Phone <b>(281) 930-2300</b>				
9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
x	1. <b>NA3077. HAZARDOUS WASTE, SOLID, N.O.S., (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>	001 CM 15 CY		15	CY	D018 D022 D028 D039 FNF8319H
	2.					
	3.					
	4.					
14. Special Handling Instructions and Additional Information <b>1. CH40902B ERG#171</b> <b>Box # N-41024</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's Name Printed/Typed Name <b>Tony Maas</b>		Signature 		Month Day Year <b>12/17/10</b>		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:				
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr</b>		Signature 		Month Day Year <b>12/17/10</b>		
Transporter 2 Printed/Typed Name <b>Miguel</b>		Signature 		Month Day Year <b>12/18/10</b>		
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number:						
18b. Alternate Facility (or Generator) U.S. EPA ID Number						
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator) Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. <b>H040</b>		2.		3.		4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name <b>Kim Bravener</b>		Signature 		Month Day Year <b>12/22/10</b>		

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

Please print or type. Form designed for use on elite (12-pitch) typewriter.)

DX3184414

SCPPW 10/26/2010

Form Approved. OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000115085 MWI</b>	
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Maylin Ave Freeport, TX 77541 Generator's Phone: (713) 400-5651</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>			
6. Transporter 1 Company Name <b>Hexion Resources</b>			U.S. EPA ID Number <b>ALR000007237</b>			
7. Transporter 2 Company Name <b>Clean Harbors Inc.</b>			U.S. EPA ID Number <b>MA005932250</b>			
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 Facility's Phone: (281) 930-2300</b>			U.S. EPA ID Number <b>TXD055141378</b>			
GENERATOR	9a. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity	12. Unit Wt./Vol.
	1. <b>RD UN1992 WASTE FLAMMABLE LIQUIDS, N.O.S. (PETROLEUM OIL), 3, PG II (BENZENE TOC &gt; 10%) NA3077 HAZARDOUS WASTE SOLID NOS (SOIL &amp; RWST), 9, PG III (BENZENE), Chloroform</b>		No.	Type		
14. Special Handling Instructions and Additional Information <b>1. CH440902B Box # 2536 RB</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Officer's Printed/Typed Name <b>Tony MAAQ</b>			Signature 		Month <b>12</b>	Day <b>17</b> Year <b>10</b>
INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:					
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials					
	Transporter 1 Printed/Typed Name <b>ARUN KRISHNA J.</b>			Signature 		Month <b>12</b> Day <b>17</b> Year <b>10</b>
DESIGNATED FACILITY	Transporter 2 Printed/Typed Name <b>JENNIFER KOLB</b>			Signature 		Month <b>12</b> Day <b>18</b> Year <b>10</b>
	18. Discrepancy					
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
	Manifest Reference Number:					
18b. Alternate Facility (or Generator) U.S. EPA ID Number						
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator) Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. <b>H040</b>		2.		3.		4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name <b>Kim Bravener</b>			Signature 		Month <b>12</b>	Day <b>22</b> Year <b>10</b>

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DX3242272

SC PPW 10/26/2010

Form Approved, OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number TX P 4 9 0 3 5 0 2 3 9	2. Page 1 of 1	3. Emergency Response Phone (800) 483-3718	4. Manifest Tracking Number 000107504 MWI			
5. Generator's Name and Mailing Address LDL Coastal LP 906 Martin Ave Freeport, TX 77541 Generator's Phone: 713 400-5651			Generator's Site Address (if different than mailing address) SAME					
6. Transporter 1 Company Name Action Resources			U.S. EPA ID Number AKR000007237					
7. Transporter 2 Company Name Clean Harbors			U.S. EPA ID Number TXD05514137B					
8. Designated Facility Name and Site Address Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 Facility's Phone: (281) 930-2300			U.S. EPA ID Number TXD05514137B					
9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
x	1. NA3077. HAZARDOUS WASTE, SOLID, N.O.S., (SOIL & RUST, SCALE), 9, PG III, (BENZENE, CHLOROFORM)		001 CM 15		9		D018 D022 D028 D039 FN8319H	
	2.							
	3.							
	4.							
14. Special Handling Instructions and Additional Information 1. CH440902B ERG#171 Box RB 26712								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's Printed/Typed Name Tony Maaq			Signature 			Month Day Year 12 20 10		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name Arturo Espinoza Jr			Signature 			Month Day Year 12 20 10		
Transporter 2 Printed/Typed Name Beth Fick			Signature 			Month Day Year 12 20 10		
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number								
Facility's Phone:								
18c. Signature of Alternate Facility (or Generator) Month Day Year								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. H040		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name Kim Bravenec			Signature 			Month Day Year 12 22 10		

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DX3242272

SC PPW 10/26/2010

Form Approved. OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TX P 4 9 0 3 5 0 2 3 9</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107505MWI</b>			
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>					
Generator's Phone: <b>(713) 400-5651</b>								
6. Transporter 1 Company Name <b>Acron Resources</b>			U.S. EPA ID Number <b>AL000007237</b>					
7. Transporter 2 Company Name <b>Clean Harbors</b>			U.S. EPA ID Number <b>MA003930720</b>					
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>			U.S. EPA ID Number <b>TXD055141378</b>					
Facility's Phone: <b>(281) 930-2300</b>								
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
X	1. <b>NA3077. HAZARDOUS WASTE. SOLID. N.O.S. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>		0101 CM 15 CY				D018 D022 D028 D039 FNF8319H	
	2.							
	3.							
	4.							
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171</b> <b>Box 105 2609</b>								
15. GENERATOR'S/CERTIFIER'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Certifier's Printed/Typed Name <b>Louy Wang</b> Signature <b>[Signature]</b> Month Day Year <b>12 24 10</b>								
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:								
17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr.</b> Signature <b>[Signature]</b> Month Day Year <b>12 20 10</b> Transporter 2 Printed/Typed Name <b>Beth Falke</b> Signature <b>[Signature]</b> Month Day Year <b>12 20 10</b>								
18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: U.S. EPA ID Number:								
18b. Alternate Facility (or Generator) Facility's Phone: 18c. Signature of Alternate Facility (or Generator) Month Day Year								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. <b>H040</b> 2. 3. 4.								
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name <b>Jannice Kobb</b> Signature <b>[Signature]</b> Month Day Year <b>10 24 10</b>								

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX3242272

SC PPW 10/26/2010

Form Approved, OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-plth) typewriter.)

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107506MWI</b>				
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541 (713) 400-5651</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>						
Generator's Phone:									
6. Transporter 1 Company Name <b>Action Resources</b>			U.S. EPA ID Number <b>AKR000007237</b>						
7. Transporter 2 Company Name <b>Clean Harbors</b>			U.S. EPA ID Number <b>MDA037320010</b>						
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 Facility's Phone: (281) 930-2300</b>			U.S. EPA ID Number <b>TXD055141378</b>						
GENERATOR	9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity	12. Unl. Wt./Vol.	13. Waste Codes	
				No.	Type				
	<b>X</b>	<b>1. NA3077. HAZARDOUS WASTE. SOLID. N.O.S. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>		<b>001</b>	<b>4M</b>	<b>15</b>	<b>CY</b>	<b>D018</b>	<b>D022</b>
								<b>D039</b>	<b>FNF8319H</b>
14. Special Handling Instructions and Additional Information <b>1. CH440902B</b> <b>ERG#171</b> <b>BOX 35202</b>									
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.									
Generator's/Officer's Printed/Typed Name <b>Tony Maas</b>			Signature <i>[Signature]</i>			Month Day Year <b>12 21 10</b>			
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:									
17. Transporter Acknowledgment of Receipt of Materials									
Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr</b>			Signature <i>[Signature]</i>			Month Day Year <b>12 21 10</b>			
Transporter 2 Printed/Typed Name <b>Beth Riddle</b>			Signature <i>[Signature]</i>			Month Day Year <b>12 21 10</b>			
18. Discrepancy									
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection									
Manifest Reference Number:									
18b. Alternate Facility (or Generator) U.S. EPA ID Number									
Facility's Phone:									
18c. Signature of Alternate Facility (or Generator) Month Day Year									
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)									
1. <b>H040</b> 2. 3. 4.									
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a									
Printed/Typed Name <b>Wray Dab</b>			Signature <i>[Signature]</i>			Month Day Year <b>12 25 10</b>			

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX3242272

SC PPW 10/26/2010

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107512 MWI</b>
5. Generator Name and Mailing Address <b>IDL Coastal LP 906 Marlin Ave Freeport, TX 77541 7131400-5651</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>			
6. Transporter 1 Company Name <b>Action Resources</b>		U.S. EPA ID Number <b>AL0000007237</b>			
7. Transporter 2 Company Name <b>Clean Harbors</b>		U.S. EPA ID Number <b>TXD055141378</b>			
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 Facility's Phone: (281) 930-2300</b>		U.S. EPA ID Number <b>TXD055141378</b>			
9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.
x	1. <b>NA3077. HAZARDOUS WASTE. SOLID. N.O.S. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>	001	CM	15	CY
	2.				
	3.				
	4.				
13. Waste Codes <b>D018 D022 D028 D039 FNF83 L9H</b>					
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171 Box N48754</b>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Operator's Printed/Typed Name <b>Tony Maag</b>		Signature 		Month Day Year <b>12/21/10</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:			
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr.</b>		Signature 		Month Day Year <b>12/21/10</b>	
Transporter 2 Printed/Typed Name <b>Beth Falke</b>		Signature 		Month Day Year <b>12/21/10</b>	
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number:					
Facility's Phone:					
18c. Signature of Alternate Facility (or Generator) Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <b>H040</b>		2.		3.	
4.		5.		6.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a					
Printed/Typed Name <b>Jennifer Kobb</b>		Signature 		Month Day Year <b>10/25/10</b>	

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DX3242272

SC PPW 10/26/2010

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TX P 4 9 0 3 5 0 2 3 9</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107507 MWI</b>			
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>					
Generator's Phone: <b>(713) 400-5651</b>			U.S. EPA ID Number <b>ALR000007237</b>					
6. Transporter 1 Company Name <b>Eaton Resources</b>			U.S. EPA ID Number <b>TXD055141378</b>					
7. Transporter 2 Company Name <b>Clean Harbors</b>			U.S. EPA ID Number <b>TXD055141378</b>					
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>			U.S. EPA ID Number <b>TXD055141378</b>					
Facility's Phone: <b>(281) 930-2300</b>								
GENERATOR	9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
	X	1. <b>NA3077. HAZARDOUS WASTE. SOLID. N.O.S.. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>	001 CM 15 CY		15	CY	D018 D022 D028	D039 FNF8319H
		2.						
		3.						
		4.						
14. Special Handling Instructions and Additional Information <b>1. CH40902B ERG#171</b> <b>Box N44607</b>								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's Signature <b>Tony Wang</b>			Signature <b>[Signature]</b>			Month Day Year <b>12/22/10</b>		
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:							
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name: <b>Arturo Espinoza Jr</b> Signature: <b>[Signature]</b> Month Day Year: <b>12/22/10</b> Transporter 2 Printed/Typed Name: <b>Seeth Talke</b> Signature: <b>[Signature]</b> Month Day Year: <b>12/22/10</b>							
DESIGNATED FACILITY	18. Discrepancy							
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
	18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number:							
	Facility's Phone: 18c. Signature of Alternate Facility (or Generator) Month Day Year:							
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. <b>H040</b>		2.		3.		4.		
20. Designated Facility Owner or Operator. Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a								
Printed/Typed Name: <b>Evelyn Lee</b>			Signature: <b>[Signature]</b>			Month Day Year: <b>12/30/10</b>		

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX3242272

SC PPW 10/26/2010

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TXD055141378</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107508 MWI</b>		
5. Generator's Name and Mailing Address <b>28E Coastal 906 Martin Ave Freeport, TX 77541 (713) 400-5651</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>					
6. Generator's Phone:		U.S. EPA ID Number <b>TXD000007237</b>					
8. Transporter 1 Company Name <b>Action Resource</b>		U.S. EPA ID Number <b>TXD003932220</b>					
7. Transporter 2 Company Name <b>Clean Harbors</b>		U.S. EPA ID Number <b>TXD055141378</b>					
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 Facility's Phone: (281) 930-2300</b>							
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	x	HA3077. HAZARDOUS WASTE. SOLID. N.O.S. (SOIL & RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)	001 CM		15	cy	D018 D022 D028 D039 FNF8319H
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171</b> <b>Box RBR 250185</b>							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Officer's Printed/Typed Name <b>Tony MAAg</b>		Signature 		Month Day Year <b>12/27/10</b>			
INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:				
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials		Signature 		Month Day Year <b>12/27/10</b>		
	Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr.</b>		Signature 		Month Day Year <b>12/27/10</b>		
DESIGNATED FACILITY	18. Discrepancy						
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
	Manifest Reference Number:						
	18b. Alternate Facility (or Generator) U.S. EPA ID Number						
	Facility's Phone:						
18c. Signature of Alternate Facility (or Generator)						Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1. <b>H040</b>		2.		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest, except as noted in item 18a							
Printed/Typed Name <b>Beth Falke</b>		Signature 		Month Day Year <b>12/27/10</b>			

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>		2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>		4. Manifest Tracking Number <b>000107509MWI</b>			
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541</b>				Generator's Site Address (if different than mailing address) <b>SAME</b>						
Generator's Phone: <b>(713) 400-5651</b>										
6. Transporter 1 Company Name <b>Action Resources</b>				U.S. EPA ID Number <b>ALR000007237</b>						
7. Transporter 2 Company Name <b>Clean Harbors Deer Park</b>				U.S. EPA ID Number <b>MD050322250</b>						
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>				U.S. EPA ID Number <b>TXD055141378</b>						
Facility's Phone: <b>(281) 930-2300</b>										
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
	X	1. <b>NA3077. HAZARDOUS WASTE. SOLID. N.O.S.. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>			001 CMT 15 CY				D018 D022 D028	
		2.							D039 FNF8319H	
		3.								
		4.								
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171</b> <b>Box # N23486</b>										
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.										
Generator's/Offeree's Printed/Typed Name: <b>Tony MAAQ</b> Signature: <i>[Signature]</i> Month: <b>12</b> Day: <b>27</b> Year: <b>10</b>										
INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____									
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials									
	Transporter 1 Printed/Typed Name: <b>ARTURO ESPINOZA Jr.</b> Signature: <i>[Signature]</i> Month: <b>12</b> Day: <b>27</b> Year: <b>10</b>					Transporter 2 Printed/Typed Name: <b>JOHN G. LOLO</b> Signature: <i>[Signature]</i> Month: <b>12</b> Day: <b>27</b> Year: <b>10</b>				
DESIGNATED FACILITY	18. Discrepancy									
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input checked="" type="checkbox"/> Full Rejection									
	<b>Back to generator per Tony M.</b> Manifest Reference Number: _____ U.S. EPA ID Number: _____									
	18b. Alternate Facility (or Generator) _____ U.S. EPA ID Number: _____									
Facility's Phone: _____										
18c. Signature of Alternate Facility (or Generator) _____ Month: _____ Day: _____ Year: _____										
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)										
1. <b>H040</b> 2. _____ 3. _____ 4. _____										
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a										
Printed/Typed Name: <b>Julien Lee</b> Signature: <i>[Signature]</i> Month: <b>11</b> Day: <b>15</b> Year: <b>11</b>										

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DX3242272

SCPPW 10/26/2010

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TX P 4 9 0 3 5 0 2 3 9</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107564 MWI</b>			
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>					
Generator's Phone: <b>(713) 400-6651</b>								
6. Transporter 1 Company Name <b>Clean Harbors Environmental Services Inc</b>			U.S. EPA ID Number <b>MAD039322250</b>					
7. Transporter 2 Company Name <b>Action Resources</b>			U.S. EPA ID Number <b>ALR0000007237</b>					
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>			U.S. EPA ID Number <b>TXD055141378</b>					
Facility's Phone: <b>(281) 930-2300</b>								
GENERATOR	9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit WL/Vol.	13. Waste Codes	
	1.	<b>HA3077. HAZARDOUS WASTE. SOLID. N.O.S.. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>	<b>001</b>	<b>CM</b>	<b>15</b>	<b>cy</b>	<b>D018 D022 D028</b>	<b>D039 FNF8319H</b>
	2.							
	3.							
	4.							
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#1.7.1</b> <b>Box # N48861</b>								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's Officer's Printed/Typed Name <b>Tony Wang</b>			Signature <i>[Signature]</i>			Month Day Year <b>12 29 10</b>		
INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Data leaving U.S.:					
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials							
	Transporter 1 Printed/Typed Name <b>Alex Napolitano</b>			Signature <i>[Signature]</i>			Month Day Year <b>12 29 10</b>	
DESIGNATED FACILITY	Transporter 2 Printed/Typed Name <b>Beth Falk</b>			Signature <i>[Signature]</i>			Month Day Year <b>12 29 10</b>	
	18. Discrepancy							
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
	Manifest Reference Number: U.S. EPA ID Number							
18b. Alternate Facility (or Generator)								
Facility's Phone:								
18c. Signature of Alternate Facility (or Generator)								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. <b>H040</b>		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name <b>Frederic Lee</b>			Signature <i>[Signature]</i>			Month Day Year <b>1 17 11</b>		

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DX3242272

SC PPW 10/26/2010

Form Approved. OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TX P 4 9 0 3 5 0 2 3 9</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107569 MWI</b>	
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>				
Generator's Phone: <b>(713) 400-5651</b>						
6. Transporter 1 Company Name <b>Clean Harbors Environmental Services Inc. Action Resources</b>		U.S. EPA ID Number <b>MA000007237</b>				
7. Transporter 2 Company Name <b>Clean Harbors</b>		U.S. EPA ID Number <b>MA0003932050</b>				
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>		U.S. EPA ID Number <b>TXD055141378</b>				
Facility's Phone: <b>(281) 930-2300</b>						
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. <b>NA3077. HAZARDOUS WASTE. SOLID. N.O.S. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>	001 CM 15 CY				D018 D022 D028 D039 FNF8319H
	2.					
	3. CR FS OFFC					
	4.					
14. Special Handling Instructions and Additional Information <b>1. CH440902B</b> <b>ERG#171</b> <b>Box N48754</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Officer's Printed/Typed Name <b>Lony Maty</b>		Signature <i>[Signature]</i>		Month Day Year <b>12 30 10</b>		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr.</b>		Signature <i>[Signature]</i>		Month Day Year <b>12 30 10</b>		
Transporter 2 Printed/Typed Name <b>Beth Falke</b>		Signature <i>[Signature]</i>		Month Day Year <b>12 30 10</b>		
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number						
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator) Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. <b>H040</b> 2. 3. 4.						
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name <b>Mary Palaz</b>		Signature <i>[Signature]</i>		Month Day Year <b>1 19 11</b>		

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX3242272

SCPPW 10/26/2010

Form Approved, OMB No. 2050-0038

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of 1	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107566MWI</b>
5. Generator's Mailing Address <b>906 Martin Ave Freeport, TX 77541 (713) 400-5651</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>			
6. Generator's Phone <b>(713) 400-5651</b>		7. Transporter 1 Company Name <b>Clean Harbors Environmental Services Inc</b>		U.S. EPA ID Number <b>TXD055141378</b>	
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 (281) 930-2300</b>		U.S. EPA ID Number <b>TXD055141378</b>		U.S. EPA ID Number <b>TXD055141378</b>	
9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. <b>HA3077, HAZARDOUS WASTE, SOLID, N.O.S., (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>	001 CM	15	cy	D018 D022 D028 D039 FNF8319H
	2.				
	3.				
	4.				
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171</b> <b>Box # 2237</b>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/packaged, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's Signature <b>Tony Wang</b>		Signature <b>[Signature]</b>		Month Day Year <b>12/30/10</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: <b>[Blank]</b>					
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr</b>		Signature <b>[Signature]</b>		Month Day Year <b>12/30/10</b>	
Transporter 2 Printed/Typed Name <b>Seth Falke</b>		Signature <b>[Signature]</b>		Month Day Year <b>12/30/10</b>	
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number					
18c. Signature of Alternate Facility (or Generator) Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <b>H040</b> 2. 3. 4.					
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a					
Printed/Typed Name <b>Mary Salzan</b>		Signature <b>[Signature]</b>		Month Day Year <b>11/8/11</b>	

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX 3274091  
SCPPW 10/26/2010

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107568 MWI</b>				
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Martin Ave Freeport, TX 77541 (713) 400-6661</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>							
6. Generator's Phone: <b>(713) 400-6661</b>		6. Transporter's Company Name <b>Clean Harbors Environmental Services Inc - Action Resources</b>		U.S. EPA ID Number <b>MA000007037</b>					
7. Transporter's Company Name <b>Clean Harbors</b>				U.S. EPA ID Number <b>MA003937720</b>					
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>				U.S. EPA ID Number <b>TXD055141378</b>					
Facility's Phone: <b>(281) 930-2300</b>									
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	X	1. <b>NA3077. HAZARDOUS WASTE. SOLID. N.O.S. (SOIL &amp; RUST SCALE), 9, PG III. (BENZENE, CHLOROFORM)</b>	001 CM 15		15	CF	D018	D022	D028
		2.					D039	FNF8319H	
		3.							
		4.							
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171</b> <b>Box # RBR 250405</b>									
15. GENERATOR'S/CERTIFIER'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.									
Generator's/Certifier's Printed/Typed Name <b>Tony Maa</b>		Signature <i>[Signature]</i>		Month Day Year <b>01 03 11</b>					
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:						
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1. Printed/Typed Name <b>Arturo Espinoza Jr.</b> Signature <i>[Signature]</i> Month Day Year <b>01 03 11</b> Transporter 2. Printed/Typed Name <b>Beth Staker</b> Signature <i>[Signature]</i> Month Day Year <b>11 13 11</b>								
DESIGNATED FACILITY	18. Discrepancy								
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
	18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number:								
	Facility's Phone: 18c. Signature of Alternate Facility (or Generator) Month Day Year								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)									
1. <b>H040</b> 2. 3. 4.									
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a Printed/Typed Name <b>Helen Lee</b> Signature <i>[Signature]</i> Month Day Year <b>11 12 11</b> <b>DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)</b>									

for and will accept the waste the generator is shipping.

DX 3274091

DN3242272

SCPPW 10/26/2010

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107567MWI</b>
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>			
Generator's Phone: <b>(713) 400-5651</b>					
6. Transporter 1 Company Name <b>Clean Harbors Environmental Services Inc.</b>		U.S. EPA ID Number <b>MA000007237</b>			
7. Transporter 2 Company Name <b>Clean Harbors</b>		U.S. EPA ID Number <b>MA003932250</b>			
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>		U.S. EPA ID Number <b>TXD055141378</b>			
Facility's Phone: <b>(281) 930-2300</b>					
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type	11. Total Quantity	12. Unit Wt./Vol.
	X	1. <b>NA3077. HAZARDOUS WASTE. SOLID. N.O.S.. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>	001 CM 15 CY	15	CY
		2.			
		3.			
		4.			
13. Waste Codes <b>D018 D022 D028 D039 FNF8319H</b>					
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171</b> <b>N16B22</b>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Officer's Printed Name: <b>Tommy Mang</b> Signature: <i>[Signature]</i> Month: <b>1</b> Day: <b>4</b> Year: <b>11</b>					
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____				
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name: <b>Arturo Espinoza Jr</b> Signature: <i>[Signature]</i> Month: <b>01</b> Day: <b>04</b> Year: <b>11</b> Transporter 2 Printed/Typed Name: <b>Sebastian</b> Signature: <i>[Signature]</i> Month: <b>1</b> Day: <b>5</b> Year: <b>11</b>				
DESIGNATED FACILITY	18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: _____ U.S. EPA ID Number: _____				
	18b. Alternate Facility (or Generator) Facility's Phone: _____				
	18c. Signature of Alternate Facility (or Generator) _____ Month: _____ Day: _____ Year: _____				
	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. <b>H040</b> 2. _____ 3. _____ 4. _____				
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a Printed/Typed Name: <b>William Lee</b> Signature: <i>[Signature]</i> Month: <b>11</b> Day: <b>12</b> Year: <b>11</b>					

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX3274091

SC PPW 10/26/2010

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107652 MWI</b>	
5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541 (713) 400-5651</b>			Generator's Site Address (if different than mailing address) <b>SAME</b>			
6. Transporter 1 Company Name <b>Action Resources Incorporated</b>			U.S. EPA ID Number <b>ALR000007237</b>			
7. Transporter 2 Company Name <b>Clean Harbors</b>			U.S. EPA ID Number <b>TXD055141378</b>			
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 (281) 830-2300</b>			U.S. EPA ID Number <b>TXD055141378</b>			
Facility's Phone:						
9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
X	1. <b>HA3077. HAZARDOUS WASTE, SOLID, N.O.S. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>	001 CM	15	cy	D018 D022 D028	D039 FNF83L9H
	2.					
	3.					
	4.					
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171</b> <b>Box # NB 26833</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Officer's Printed/Typed Name <b>Tommy Mong</b>			Signature <i>[Signature]</i>		Month Day Year <b>11/4/11</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:						
17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name <b>ARTURO ESPINOZA Jr</b> Signature <i>[Signature]</i> Month Day Year <b>10/04/11</b> Transporter 2 Printed/Typed Name <b>Beth Falkner</b> Signature <i>[Signature]</i> Month Day Year <b>11/14/11</b>						
18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: U.S. EPA ID Number						
18b. Alternate Facility (or Generator) U.S. EPA ID Number						
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator) Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. <b>H040</b> 2. 3. 4.						
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name <b>Evelyn Lee</b> Signature <i>[Signature]</i> Month Day Year <b>11/13/11</b>						

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX3274091

SC PPW 10/26/2010

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TX P 4 9 0 3 5 0 2 3 9</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107653 MWI</b>			
5. Generator Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>						
Generator's Phone: <b>(713) 400-5651</b>								
6. Transporter 1 Company Name <b>Action Resources Incorporated</b>		U.S. EPA ID Number <b>ALR000007237</b>						
7. Transporter 2 Company Name <b>Clean Harbors</b>		U.S. EPA ID Number <b>TXD055141378</b>						
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571</b>		U.S. EPA ID Number <b>TXD055141378</b>						
Facility's Phone: <b>(281) 930-2300</b>								
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
X	1. <b>HA3077. HAZARDOUS WASTE. SOLID. N.O.S.. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>		<b>001 CM 15 CY</b>				<b>D018 D022 D028</b>	<b>D039 FNF8319H</b>
	2.							
	3.							
	4.							
14. Special Handling Instructions and Additional Information <b>1. CH440902B ERG#171</b> <b>Box LB2609</b>								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeree's Printed Name <b>Louie Mung</b>		Signature <i>[Signature]</i>		Month <b>1</b>		Day <b>5</b>		Year <b>11</b>
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Part of entry/exit: _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr</b>		Signature <i>[Signature]</i>		Month <b>01</b>		Day <b>05</b>		Year <b>11</b>
Transporter 2 Printed/Typed Name <b>Self Talker</b>		Signature <i>[Signature]</i>		Month <b>1</b>		Day <b>5</b>		Year <b>11</b>
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
18b. Alternate Facility (or Generator) Manifest Reference Number: _____ U.S. EPA ID Number _____								
Facility's Phone: _____								
18c. Signature of Alternate Facility (or Generator) _____ Month _____ Day _____ Year _____								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. <b>H040</b>		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a								
Printed/Typed Name <b>Thuy Lee</b>		Signature <i>[Signature]</i>		Month <b>11</b>		Day <b>13</b>		Year <b>11</b>

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY (TO DESTINATION STATE (IF REQUIRED))

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX3274091

SCPPW 10/26/2010

Form Approved, OMB No. 2050-0039

Please print or type. (Form designed for use on ellipse (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TXF490350239</b>	2. Page 1 of 1	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107656 MWI</b>	
5. Generator's Mailing Address <b>181 Overhill 906 Marlin Ave Freeport, TX 77541 (713) 400-8651</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>				
6. Transporter 1 Company Name <b>Action Resources Incorporated</b>		U.S. EPA ID Number <b>ALR000007237</b>				
7. Transporter 2 Company Name <b>Clean Harbors</b>		U.S. EPA ID Number <b>MAPO39322250</b>				
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 (281) 930-2300</b>		U.S. EPA ID Number <b>TXD055141378</b>				
Facility's Phone:						
9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt/Vol	13. Waste Codes
X	1. <b>HA3077, HAZARDOUS WASTE, SOLID, N.O.S., (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>	001	CM	15	cy	D018 D022 D028 D038 FNF8319H
	2.					
	3.					
	4.					
14. Special Handling Instructions and Additional Information <b>Box # A112736</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Owner's Printed/Typed Name <b>Louy Wang</b> Signature <b>[Signature]</b> Month Day Year <b>11 5 11</b>						
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name <b>ANTONIO SPINOZA JR.</b> Signature <b>[Signature]</b> Month Day Year <b>10 10 11</b>						
Transporter 2 Printed/Typed Name <b>Beth Halko</b> Signature <b>Beth Halko</b> Month Day Year <b>11 5 11</b>						
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number:						
18b. Alternate Facility (or Generator) U.S. EPA ID Number						
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator) Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. <b>H040</b> 2. 3. 4.						
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name <b>Chun Lee</b> Signature <b>[Signature]</b> Month Day Year <b>11 13 11</b>						

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DX3274091

SC PPW 10/26/2010

Form Approved, OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TX 440350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107654 MWI</b>
5. Generator Mailing Address <b>906 Martin Ave Freeport, TX 77541 (713) 400-5651</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>			
6. Transporter 1 Emergency Name <b>Adson Resources Incorporated</b>		U.S. EPA ID Number <b>ALR000007237</b>			
7. Transporter 2 Company Name <b>Clean Harbors</b>		U.S. EPA ID Number <b>TXD055141378</b>			
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 (281) 930-2300</b>		U.S. EPA ID Number <b>TXD055141378</b>			
Facility's Phone:					
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.
x	1. <b>HA3077, HAZARDOUS WASTE, SOLID, N.O.S., (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>	001 CM		15	cy
	2.				
	3.				
	4.				
13. Waste Codes <b>D018 D022 D028 D038 FNF8319H</b>					
14. Special Handling Instructions and Additional Information <b>1. CH44035025 ERG#171 Box # RB26606</b>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations, if export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's Printed/Typed Name <b>Tom MAA9</b>		Signature <i>[Signature]</i>		Month Day Year <b>1 6 11</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:			
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name <b>ASTURA ESPINOZA Jr.</b>		Signature <i>[Signature]</i>		Month Day Year <b>01 06 11</b>	
Transporter 2 Printed/Typed Name <b>Seth Halk</b>		Signature <i>[Signature]</i>		Month Day Year <b>1 6 11</b>	
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number					
Facility's Phone:					
18c. Signature of Alternate Facility (or Generator)				Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <b>H040</b>		2.		3.	
4.		5.		6.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a					
Printed/Typed Name <b>Julyn Lee</b>		Signature <i>[Signature]</i>		Month Day Year <b>1 14 11</b>	

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

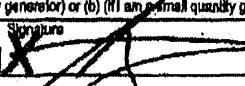
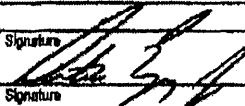

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TX P 4 9 0 3 5 0 2 3 9</b>		2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>		4. Manifest Tracking Number <b>000107657 MWI</b>	
		5. Generator's Name and Mailing Address <b>LDL Coastal LP 906 Marlin Ave Freeport, TX 77541 (713) 400-5651</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>				
6. Transporter 1 Company Name <b>Action Resources Incorporated</b>		U.S. EPA ID Number <b>ALR000007237</b>						
7. Transporter 2 Company Name <i>Clean Harbors</i>		U.S. EPA ID Number <i>MA10039378250</i>						
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 (281) 930-2300</b>		U.S. EPA ID Number <b>TXD055141378</b>						
9a. HM		9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
				No.	Type			
<b>x</b>		1. <b>HA3077, HAZARDOUS WASTE, SOLID, N.O.S., (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>		<b>001 CM 15 CY</b>		<b>15</b>	<b>cy</b>	<b>D018 D022 D028</b>
								<b>D039 FNF8319H</b>
14. Special Handling Instructions and Additional Information <b>1. CH440902B</b> <b>ERG#171</b> <b>BOX # N35202</b>								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeree's Printed/Typed Name <i>Tommy Mraz</i>		Signature <i>[Signature]</i>				Month Day Year <b>12 8 11</b>		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:						
17. Transporter Acknowledgment of Receipt of Materials		Transporter 1 Printed/Typed Name <i>Arturo Espinoza Jr</i>		Signature <i>[Signature]</i>		Month Day Year <b>02 08 11</b>		
		Transporter 2 Printed/Typed Name <i>[Signature]</i>		Signature <i>[Signature]</i>		Month Day Year <b>12 8 11</b>		
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number								
Facility's Phone:								
18c. Signature of Alternate Facility (or Generator) Month Day Year								
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1. <b>H040</b>		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name <i>Evelyn Lee</i>		Signature <i>[Signature]</i>				Month Day Year <b>12 17 11</b>		

Please print or type (as designed for use on 12-pitch typewriter.)

**E<sup>2</sup>**  
EPA  
UNIFORM HAZARDOUS  
WASTE MANIFEST

**NO WASHOUT**

Order #: 58405  
Form Approved, OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239 / XXX12</b>		2. Page 1 of		3. Emergency Response Phone <b>972-329-1200</b>		4. Manifest Tracking Number <b>001370018 GBF</b>		
5. Generator's Name and Mailing Address LDL Coastal LP / Gulfco Marine Tank Demo 806 Marlin Avenue, Freeport, TX 77541 Generator's Phone: <b>ATTN:</b>										
6. Generator's Site Address (if different than mailing address)										
6. Transporter 1 Company Name <b>Action Resources, Inc.</b>					Phone: <b>800-475-2245</b>		U.S. EPA ID Number <b>ALR000007237</b>			
7. Transporter 2 Company Name					State ID#: <b>880185</b>		U.S. EPA ID Number			
8. Designated Facility Name and Site Address Waste Management - Coastal Plains RDF 21000 East Highway 6 Arlin TX 77511										
Facility's Phone: <b>281-388-1700</b>					State ID#: <b>H1721</b>		U.S. EPA ID Number <b>H1721</b>			
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes			
			No.	Type						
	<input type="checkbox"/>	1. Non-regulated material (soil & debris), . . . .	<b>001</b>	<b>CM</b>	<b>20</b> <b>50</b>	<b>Y</b>	<b>FNE31191</b> <b>Non-RCRA</b>			
		2.								
		3.								
		4.								
14. Special Handling Instructions and Additional Information 01: Non-haz soil and debris (PF:119301TX)  <b>K. Quantity = 20 CY (MAN)</b>										
15. GENERATOR/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.										
Generator's/Officer's Printed/Typed Name <b>X Tony May</b>										
Signature 										
Month Day Year <b>01/27/11</b>										
TRANSPORTER INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____									
	Transporter signature (for exports only): _____									
	17. Transporter Acknowledgment of Receipt of Materials									
	Transporter 1 Printed/Typed Name <b>ANTONIO ESPINOSA JR</b>					Signature 				
	Transporter 2 Printed/Typed Name					Signature				
Month Day Year <b>01/27/11</b>										
DESIGNATED FACILITY	18. Discrepancy									
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection									
	Manifest Reference Number: _____									
	18b. Alternate Facility (or Generator) U.S. EPA ID Number									
	Facility's Phone: _____									
18c. Signature of Alternate Facility (or Generator) _____ Month Day Year										
Month Day Year										
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)										
1. H132 2. 3. 4.										
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a										
Printed/Typed Name <b>Suzann Belton</b>					Signature 					
Month Day Year <b>1/28/11</b>										

Please print or type. (Do not use for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2060-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TX0490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>972-329-1200</b>	4. Manifest Tracking Number <b>001370021 GBF</b>
5. Generator's Name and Mailing Address <b>LCL COASTAL 906 MARTIN AVE EVELENT, TX 77541</b>			Generator's Site Address (if different than mailing address) <b>SAME.</b>		
6. Transporter 1 Company Name <b>BRAN SERVICES.</b>			U.S. EPA ID Number		
7. Transporter 2 Company Name			U.S. EPA ID Number		
8. Designated Facility Name and Site Address <b>WASTE MANAGEMENT - COASTAL PLAIN RBE 2100 E HWY 6 ALVIN, TX 77511</b>			U.S. EPA ID Number <b>#1721</b>		
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity
			No.	Type	12. Unit Wt/Vol
	1.	<b>NONREGULATED MATERIAL (SOIL + DEBRIS)</b>	<b>001</b>	<b>CM</b>	<b>20 CY</b>
	2.				
	3.				
13. Waste Codes <b>FAFB1A1 AW RCA</b>					
14. Special Handling Instructions and Additional Information <b>NONHAZ DEBRIS PF 119301TX</b>					
15. GENERATOR/SUPPLIER'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Supplier's Printed/Typed Name <b>Tony Matz</b>			Signature 		Month Day Year <b>1 27 11</b>
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.			Port of entry/exit: Date leaving U.S.:	
	Transporter signature (for exports only):				
DESIGNATED FACILITY	17. Transporter Acknowledgment of Receipt of Materials				
	Transporter 1 Printed/Typed Name <b>R Sevela</b>	Signature 		Month Day Year <b>1 28 11</b>	
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
Manifest Reference Number:					
18b. Alternate Facility (or Generator) U.S. EPA ID Number					
Facility's Phone:					
18c. Signature of Alternate Facility (or Generator) Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <b>H132</b> 2. 3. 4.					
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a					
Printed/Typed Name <b>Quandro</b>			Signature 		Month Day Year <b>1 28 11</b>

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type (Form designed for use on elite (12-pitch) typewriter.)

EFFECTIVE  
11/10/2000

NO WAS NOT!

Order #: 58405  
Form Approved. OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239 / XXX12</b>	2. Page 1 of 1	3. Emergency Response Phone <b>972-329-1200</b>	4. Manifest Tracking Number <b>001370019 GBF</b>	
5. Generator's Name and Mailing Address <b>LDL Coastal LP / Gulfco Marine Tank Demo 906 Marlin Avenue, Freeport, TX 77541 Generator's Phone: ATTN:</b>			Generator's Site Address (if different than mailing address)			
6. Transporter 1 Company Name <b>Action Resources, Inc.</b>			Ph#: <b>800-475-8815</b> State ID#: <b>680185</b>		U.S. EPA ID Number <b>ALR000007237</b>	
7. Transporter 2 Company Name					U.S. EPA ID Number	
8. Designated Facility Name and Site Address <b>Waste Management - Coastal Plains RDF 21000 East Highway 6 Alvin, TX 77511</b>			State ID#: <b>H1721</b>		U.S. EPA ID Number	
Facility's Phone: <b>281-388-1708</b>						
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.
	<input type="checkbox"/>	1. Non-regulated material (soil & debris) . . . .	<b>001 CM</b>		<b>17</b>	<b>Y</b>
		2.				
		3.				
		4.				
13. Waste Codes <b>FNF31191 Non-RCRA</b>						
14. Special Handling Instructions and Additional Information <b>01: Non-haz soil and debris (PF:119301TX) Box - 2536 RB.</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Officer's Printed/Typed Name <b>X Tony MAAG</b>		Signature 		Month Day Year <b>1 27 11</b>		
INTL	16. International Shipment: <input type="checkbox"/> Import to U.S. <input checked="" type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:			
	Transporter signature (for exports only):					
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials		Signature		Month Day Year	
	Transporter 1 Printed/Typed Name <b>Arturo Espinoza Jr</b>				<b>01 27 11</b>	
DESIGNATED FACILITY	Transporter 2 Printed/Typed Name		Signature		Month Day Year	
	18. Discrepancy					
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
	Manifest Reference Number:					
18b. Alternate Facility (or Generator)		U.S. EPA ID Number				
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator)		Month Day Year				
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. <b>01: H132</b>		2.		3.		4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name <b>Quandros</b>		Signature 		Month Day Year <b>1 12 11</b>		

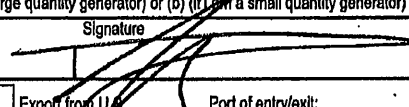
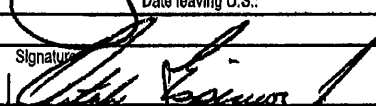
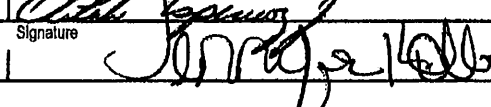
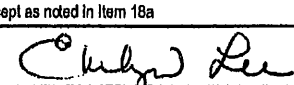
Form Approved. OMB No. 2050-0038

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number <b>TXP490350239 / XXX12</b>		2. Page 1 of 1		3. Emergency Response Phone <b>972-329-1200</b>		4. Manifest Tracking Number <b>001370171 GBF</b>	
5. Generator's Name and Mailing Address <b>LDL Coastal LP / Gulfed Marine Tank Demo</b> <b>908 Marlin Avenue,</b> <b>Freeport, TX 77541</b> Generator's Phone: <b>ATTN:</b>					Generator's Site Address (if different than mailing address)				
6. Transporter 1 Company Name <b>Effective Environmental, Inc.</b>					Phone: <b>713-672-8108</b>		U.S. EPA ID Number <b>TXR000051508</b>		
7. Transporter 2 Company Name					State ID#: <b>TX-87158/AR-H-198</b>		U.S. EPA ID Number		
8. Designated Facility Name and Site Address <b>Waste Management - Coastal Plains RDF</b> <b>21000 East Highway B</b> <b>Allen, TX 75011</b>					State ID#: <b>H1721</b>		U.S. EPA ID Number <b>H1721</b>		
Facility's Phone: <b>281-388-1708</b>									
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))				10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
					No.	Type			
1	Non-regulated material (soil & debris with rain water) (Class 1 liquid) . . . .				001	CM	16	T	FNF31181 Non-RCRA
2									
3									
4									
14. Special Handling Instructions and Additional Information 01: Non-haz soil & debris with rain water (PF:118450TX)  <div style="display: flex; justify-content: space-between;"> <span><b>N 27 555</b></span> <span>I hereby certify that the above described materials are non-hazardous wastes as defined by 40 CFR 261 or applicable state law. Further, the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.</span> </div>									
15. GENERATOR/SOFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.									
Generator/Officer's Printed/Typed Name <b>X Robert Beltran</b>									
Signature <b>X R. B.</b>									
Month Day Year <b>12 23 11</b>									
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____									
17. Transporter Acknowledgment of Receipt of Materials									
Transporter 1 Printed/Typed Name <b>Joe Pera</b>					Signature <b>Joe Pera</b>		Month Day Year <b>12 24 11</b>		
Transporter 2 Printed/Typed Name					Signature		Month Day Year		
18. Discrepancy									
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection									
Manifest Reference Number:									
18b. Alternate Facility (or Generator) U.S. EPA ID Number									
Facility's Phone:									
18c. Signature of Alternate Facility (or Generator) Month Day Year									
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)									
1. 01: H132 2. 3. 4.									
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a									
Printed/Typed Name <b>Joe Pera</b>					Signature <b>Joe Pera</b>		Month Day Year <b>12 24 11</b>		

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED):

**Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping**

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(800) 483-3718</b>	4. Manifest Tracking Number <b>000107658MWI</b>	
5. Generator's Mailing Address <b>906 Marlin Ave Freeport, TX 77541 (713) 400-5651</b>		Generator's Site Address (if different than mailing address) <b>SAME</b>				
6. Transporter 1 Company Name <b>Nation Resources Incorporated</b>				U.S. EPA ID Number <b>ALR000007237</b>		
7. Transporter 2 Company Name <b>Clean Harbors En. Corp.</b>				U.S. EPA ID Number <b>TXD055141378</b>		
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, LLC 2027 Independence Parkway South La Porte, TX 77571 (281) 930-2300</b>				U.S. EPA ID Number <b>TXD055141378</b>		
Facility's Phone:						
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers No. Type		11. Total Quantity
	<b>x</b>	<b>NA3077, HAZARDOUS WASTE, SOLID, N.O.S. (SOIL &amp; RUST SCALE), 9, PG III, (BENZENE, CHLOROFORM)</b>		<b>001 CM</b>		<b>15 CY</b>
				12. Unit Wt./Vol.		
				13. Waste Codes		
				<b>D018 D022 D028</b>		
				<b>D039 FNF8319H</b>		
14. Special Handling Instructions and Additional Information <b>1-CH440902B ERG#171</b> <b>Box # RBR - 250185</b>						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Offeree's Printed/Typed Name <b>Tony Mass</b>				Signature 		Month Day Year <b>12 8 11</b>
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:			
	17. Transporter Acknowledgment of Receipt of Materials					
	Transporter 1 Printed/Typed Name <b>Arturo Espinosa Jr</b>		Signature 		Month Day Year <b>12 9 11</b>	
Transporter 2 Printed/Typed Name <b>Jennifer Hob</b>		Signature 		Month Day Year <b>12 9 11</b>		
DESIGNATED FACILITY	18. Discrepancy					
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
	Manifest Reference Number:					
	18b. Alternate Facility (or Generator) U.S. EPA ID Number					
	Facility's Phone:					
18c. Signature of Alternate Facility (or Generator)						
Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1. <b>H040</b>		2.		3.		4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name <b>Emilyn Lee</b>				Signature 		Month Day Year <b>12 17 11</b>

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239 / XXX12</b>	2. Page 1 of	3. Emergency Response Phone <b>972-329-1200</b>	4. Manifest Tracking Number <b>001445391 GBF</b>
5. Generator's Name and Mailing Address <b>LDL Coastal LP / Gulfco Marine Tank Demo</b> <b>906 Marlin Avenue,</b> <b>Freeport, TX 77541</b> Generator's Phone: <b>ATTN:</b>		Generator's Site Address (if different than mailing address)			
6. Transporter 1 Company Name <b>Effective Environmental, Inc.</b>		Ph#: <b>713-672-6100</b> State ID#: <b>TX-87158/AR-H-136</b>		U.S. EPA ID Number <b>TXR000051508</b>	
7. Transporter 2 Company Name <i>Clean Harbor</i>				U.S. EPA ID Number <i>TXR00039317250</i>	
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, L.P.</b> <b>2027 Battleground Road</b> <b>LaPorte, TX 77571</b>		State ID#: <b>50089</b>		U.S. EPA ID Number <b>TXD055141378</b>	
Facility's Phone: <b>281-930-2300</b>					
GENERATOR	9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	11. Total Quantity	12. Unit Wt./Vol.
	<input checked="" type="checkbox"/>	<b>RQ, Hazardous waste, solid, n.o.s. (D018, benzene), 9, NA3077, PG III, ERG 171.</b>	<b>001</b>	<b>CM</b>	<b>32906</b>
			13. Waste Codes <b>FNF8319H</b> <b>D018 D022 D028 D039</b> <b>D040</b>		
14. Special Handling Instructions and Additional Information <b>01: Hazardous solids BULK (PF:CH440902B)</b>  <div style="text-align: right; font-size: 1.2em;"><i>Box # N-26603</i></div>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Offero's Printed/Typed Name <i>X Robert Bottom</i>		Signature <i>X RLB BA</i>		Month Day Year <b>3 14 11</b>	
TRANSPORTER INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:		
	17. Transporter Acknowledgment of Receipt of Materials				
	Transporter 1 Printed/Typed Name <i>Joe Peña</i>		Signature <i>Joe Peña</i>		Month Day Year <b>3 14 11</b>
	Transporter 2 Printed/Typed Name <i>Mary Salazar</i>		Signature <i>Mary Salazar</i>		Month Day Year <b>3 14 11</b>
	18. Discrepancy				
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
DESIGNATED FACILITY	18b. Alternate Facility (or Generator)		Manifest Reference Number: U.S. EPA ID Number		
	Facility's Phone:				
	18c. Signature of Alternate Facility (or Generator) Month Day Year				
	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)				
	01: H040				
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name <i>Kelvin Lee</i> Signature <i>Kelvin Lee</i> Month Day Year <b>3 23 11</b>					

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239 / XXX12</b>	2. Page 1 of 1	3. Emergency Response Phone <b>972-329-1200</b>	4. Manifest Tracking Number <b>001445390 GBF</b>		
6. Generator's Name and Mailing Address <b>LDL Coastal LP / Gulfco Marine Tank Demo</b> <b>908 Martin Avenue,</b> <b>Freeport, TX 77541</b> Generator's Phone: <b>ATTN:</b>		Generator's Site Address (if different than mailing address)					
6. Transporter 1 Company Name <b>Effective Environmental, Inc.</b>		Ph#: <b>713-672-6100</b> State ID#: <b>TX-87458/AR-4138</b>		U.S. EPA ID Number <b>TXR000051508</b>			
7. Transporter 2 Company Name <b>Clean Harbors Inc.</b>		U.S. EPA ID Number <b>MA009320050</b>		U.S. EPA ID Number			
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, L.P.</b> <b>2027 Battleground Road</b> <b>LaPorte, TX 77571</b>		State ID#: <b>50089</b>		TXD055141378			
Facility's Phone: <b>281-830-2300</b>							
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	<input checked="" type="checkbox"/>	1. <b>RQ, Hazardous waste, solid, n.o.s. (D018, benzene), 9, NA3077, PG III, ERG 171,</b>	<b>001 CM</b>		<b>20</b>	<b>Y</b>	<b>FNF8319H</b> <b>D018 D022 D028 D039 D040</b>
	<input type="checkbox"/>	2.					
	<input type="checkbox"/>	3.					
	<input type="checkbox"/>	4.					
14. Special Handling Instructions and Additional Information <b>01: Hazardous solids BULK (PF:CH440902B)</b> <b>2535 RB</b>							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Officer's Printed/Typed Name <b>X Robert Beltran</b>		Signature <b>X R. A. B.</b>		Month Day Year <b>3 14 11</b>			
TRANSPORTER	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:				
	Transporter signature (for exports only):						
DESIGNATED FACILITY	17. Transporter Acknowledgment of Receipt of Materials						
	Transporter 1 Printed/Typed Name <b>Joe Peña</b>		Signature <b>Joe Peña</b>		Month Day Year <b>3 14 11</b>		
	Transporter 2 Printed/Typed Name <b>Jannie K.</b>		Signature <b>Jannie K.</b>		Month Day Year <b>3 14 11</b>		
	18. Discrepancy						
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
	18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number						
	Facility's Phone:						
	18c. Signature of Alternate Facility (or Generator) Month Day Year						
	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
	1. <b>01: H040</b>		2.		3.		4.
	20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
	Printed/Typed Name <b>Edwin Lee</b>		Signature <b>Edwin Lee</b>		Month Day Year <b>3 22 11</b>		

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239 / XXX12</b>		2. Page 1 of 1		3. Emergency Response Phone <b>972-329-1200</b>		4. Manifest Tracking Number <b>001445395 GBF</b>		
5. Generator's Name and Mailing Address <b>LDL Coastal LP / Gulfco Marine Tank Demo</b> <b>906 Marlin Avenue,</b> <b>Freeport, TX 77541</b> Generator's Phone: <b>ATTN:</b>						Generator's Site Address (if different than mailing address)				
6. Transporter 1 Company Name <b>Effective Environmental, Inc.</b>						Phone: <b>713-672-6100</b> State ID#: <b>TX-87152/AR-H-138</b>		U.S. EPA ID Number <b>TXR000051508</b>		
7. Transporter 2 Company Name <i>Clean Harbor</i>								U.S. EPA ID Number <i>TXR000051508</i>		
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, L.P.</b> <b>2027 Battleground Road</b> <b>LaPorte, TX 77571</b> Facility's Phone: <b>281-830-2300</b>						State ID#: <b>50089</b>		U.S. EPA ID Number <b>TXD055141378</b>		
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))				10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	<input checked="" type="checkbox"/>	1. <b>RQ, Hazardous waste, solid, n.o.s. (D018, benzene), 9, NA3077, PG III, ERG 171.</b>				<b>001 CM</b>		<b>35126</b>	<b>P</b>	<b>FNF8319H</b> <b>D018 D022 D026 D039</b> <b>D040</b>
	<input type="checkbox"/>	2.								
	<input type="checkbox"/>	3.								
	<input type="checkbox"/>	4.								
14. Special Handling Instructions and Additional Information <b>01: Hazardous solids BULK (PF:CH440902B)</b> <i>Box # 2592</i>										
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.										
Generator's/Officer's Printed/Typed Name <i>Robert Beltran</i> Signature <i>Robert Beltran</i> Month <b>3</b> Day <b>22</b> Year <b>11</b>										
TRANSPORTER INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____									
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name <i>Joe Pera</i> Signature <i>Joe Pera</i> Month <b>3</b> Day <b>22</b> Year <b>11</b>									
	Transporter 2 Printed/Typed Name <i>Mary Schwan</i> Signature <i>Mary Schwan</i> Month <b>3</b> Day <b>22</b> Year <b>11</b>									
DESIGNATED FACILITY	18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: _____ U.S. EPA ID Number _____									
	18b. Alternate Facility (or Generator) Facility's Phone: _____									
	18c. Signature of Alternate Facility (or Generator) Month _____ Day _____ Year _____									
	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. <b>01: H040</b> 2. _____ 3. _____ 4. _____									
	20. Designated Facility Owner or Operator Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name <i>Bridyn Lee</i> Signature <i>Bridyn Lee</i> Month <b>3</b> Day <b>31</b> Year <b>11</b>									

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239 / XXX12</b>	2. Page 1 of 1	3. Emergency Response Phone <b>972-329-1200</b>	4. Manifest Tracking Number <b>001445394 GBF</b>
5. Generator's Name and Mailing Address <b>LDL Coastal LP / Gulco Marine Tank Demo 906 Marlin Avenue, Freeport, TX 77541</b>			Generator's Site Address (if different than mailing address)		
6. Transporter 1 Company Name <b>Effective Environmental, Inc.</b>			Ph#: <b>713-672-6100</b> State ID#: <b>TX- 87158/AR-4-138</b>		U.S. EPA ID Number <b>TXR000051508</b>
7. Transporter 2 Company Name <i>Clean Harbors</i>			U.S. EPA ID Number <i>TXR000039322222</i>		
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, L.P. 2027 Battleground Road LaPorte, TX 77571</b>			State ID#: <b>50089</b>		U.S. EPA ID Number <b>TXD055141378</b>
Facility's Phone: <b>281-830-2300</b>					
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.
<input checked="" type="checkbox"/>	1. <b>RQ, Hazardous waste, solid, n.o.s. (D018, benzene), 9, NA3077, PG III, ERG 171,</b>	<b>001</b>	<b>CM</b>	<b>35460</b>	<b>P</b>
	2.				
	3.				
	4.				
13. Waste Codes <b>FNF8319H</b> <b>D018 D022 D028 D039</b> <b>D040</b>					
14. Special Handling Instructions and Additional Information <b>01: Hazardous solids BULK (PF:CH440902B)</b> <div style="text-align: right; font-size: 1.2em;">Box # 26538</div>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's/Officer's Printed/Typed Name <b>X Robert Beltran</b>		Signature <i>X R. Beltran</i>		Month Day Year <b>3 22 11</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____					
17. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name <i>Joe Pass</i>		Signature <i>Joe Pass</i>		Month Day Year <b>3 22 11</b>	
Transporter 2 Printed/Typed Name <i>Mary B</i>		Signature <i>Mary B</i>		Month Day Year <b>3 22 11</b>	
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
18b. Alternate Facility (or Generator) Manifest Reference Number: _____ U.S. EPA ID Number _____					
Facility's Phone: _____					
18c. Signature of Alternate Facility (or Generator) _____ Month Day Year _____					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <b>01: H040</b>		2.		3.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a		Printed/Typed Name <i>Bethany Lee</i>		Signature <i>Bethany Lee</i>	
				Month Day Year <b>3 13 11</b>	

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

E<sup>2</sup>

DX3352371

Order #: 59779  
Form Approved, OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239 / XXX12</b>	2. Page 1 of 1	3. Emergency Response Phone <b>972-329-1200</b>	4. Manifest Tracking Number <b>001445393 GBF</b>
5. Generator's Name and Mailing Address <b>LDL Coastal LP / Gulfco Marine Tank Demo 808 Martin Avenue, Freeport, TX 77541</b>					
Generator's Phone: <b>ATTN:</b>					
6. Transporter 1 Company Name <b>Specialized Waste Systems, Inc.</b>			Phone: <b>281-452-1735</b> State ID#: <b>40514</b>		U.S. EPA ID Number <b>TXD980870257</b>
7. Transporter 2 Company Name <i>Clean Harbors</i>					U.S. EPA ID Number <i>M40039320250</i>
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, L.P. 2027 Battleground Road LaPorte, TX 77571</b>					U.S. EPA ID Number <b>TXD055141378</b>
Facility's Phone: <b>281-930-7300</b>					
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type	11. Total Quantity	12. Unit Wt./Vol.
	<input checked="" type="checkbox"/>	<b>RQ, Hazardous waste, solid, n.o.s. (D018, benzene), 9, NA3077, PG III, ERG 171.</b>	<b>CM</b>	<b>15</b>	<b>X</b>
13. Waste Codes <b>FNF8319H</b> <b>D018 D022 D026 D039 D040</b>					
14. Special Handling Instructions and Additional Information <b>01: Hazardous solids BULK (PF:CH440902B)</b>					
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.					
Generator's Officer's Printed/Typed Name <b>X Robert Brinkman</b>					
Signature <i>Robert Brinkman</i>					
Month Day Year <b>13   25   11</b>					
INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____				
	Transporter signature (for exports only): _____				
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials				
	Transporter 1 Printed/Typed Name <b>JOSE LUIS ARMENTA</b>				
DESIGNATED FACILITY	Signature <i>Jose Luis Armenta</i>				
	Month Day Year <b>13   25   11</b>				
Transporter 2 Printed/Typed Name <b>Beth Falke</b>					
Signature <i>Beth Falke</i>					
Month Day Year <b>13   25   11</b>					
18. Discrepancy					
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
Manifest Reference Number: _____					
18b. Alternate Facility (or Generator) U.S. EPA ID Number					
Facility's Phone: _____					
18c. Signature of Alternate Facility (or Generator) Month Day Year					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
01: H040 2. 3. 4.					
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a					
Printed/Typed Name <b>Beth Falke</b>					
Signature <i>Beth Falke</i>					
Month Day Year <b>13   25   11</b>					

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>TXP490350239 / XXX12</b>	2. Page 1 of	3. Emergency Response Phone <b>972-329-1200</b>	4. Manifest Tracking Number <b>001445392 GBF</b>		
5. Generator's Name and Mailing Address <b>LDL Coastal LP / Gulfco Marine Tank Demo 906 Marlin Avenue, Freeport, TX 77541</b>			Generator's Site Address (if different than mailing address)				
6. Transporter 1 Company Name <b>Specialized Waste Systems, Inc.</b>			Ph#: <b>281-452-1735</b> State ID#: <b>40514</b>		U.S. EPA ID Number <b>TXD980870257</b>		
7. Transporter 2 Company Name <i>Clean Harbors</i>					U.S. EPA ID Number <i>TXD003938885</i>		
8. Designated Facility Name and Site Address <b>Clean Harbors Deer Park, L.P. 2027 Battleground Road LaPorte, TX 77571</b>			State ID#: <b>50089</b>		U.S. EPA ID Number <b>TXD055141378</b>		
Facility's Phone: <b>281-930-2300</b>							
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No. Type		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	<input checked="" type="checkbox"/>	1. <b>RQ, Hazardous waste, solid, n.o.s. (D018, benzene), 9, NA3077, PG III, ER9 171.</b>			<b>15</b>	<b>Y</b>	<b>FNF8319H D018 D022 D028 D039 D040</b>
		2.					
		3.					
		4.					
14. Special Handling Instructions and Additional Information <b>01: Hazardous solids BULK (PF:CH440902B)</b>							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Officer's Printed/Typed Name <b>X Robert Bellman</b>		Signature <i>Robert Bellman</i>		Month Day Year <b>3 25 11</b>			
INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:				
	Transporter signature (for exports only):						
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials						
	Transporter 1 Printed/Typed Name <i>Jose Tapia</i>	Signature <i>Jose Tapia</i>	Month Day Year <b>3 25 11</b>				
DESIGNATED FACILITY	Transporter 2 Printed/Typed Name <i>Robert Bellman</i>		Signature <i>Robert Bellman</i>		Month Day Year <b>3 25 11</b>		
	18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
Manifest Reference Number:							
18b. Alternate Facility (or Generator) U.S. EPA ID Number							
Facility's Phone:							
18c. Signature of Alternate Facility (or Generator) Month Day Year							
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1. <b>01: H040</b>		2.		3.			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name <i>Robert Bellman</i>		Signature <i>Robert Bellman</i>		Month Day Year <b>3 25 11</b>			

## **APPENDIX E**

### **ASBESTOS INSPECTION REPORT AND RELATED INFORMATION**

---

# Asbestos Inspection

**Tank Farm  
906 Marlin Avenue  
Freeport Brazoria County, Texas 77541**



Mr. Tony Maag  
 Columbia Environmental Services, Inc.  
 13222 Reeveston Road  
 Houston, Texas 77039  
 713-868-4845 ext 5651 email tmaag@columbiaenviro.com

RE: 20110073

Dear Mr. Maag:

Phase Engineering, Inc. (Texas Department of State Health Services [TDSHS] license # 10-0224) has conducted an asbestos inspection for demolition purposes of the suspect materials in the tank farm area located at 606 Marlin Avenue, Freeport, Brazoria County, Texas 77541.

- ❖ Date of Inspection: November 16, 2010.
- ❖ Location Contact: Mr. Tony Maag, Telephone 281-740-6607.
- ❖ Site maps were not provided by client.
- ❖ Known areas not available for access: None (0).
- ❖ Person(s) Conducting Inspection & Texas Department of State Health Services (TDSHS) License Number: Neal Barnes TDSHS # 105626.
- ❖ Total number of samples taken: Seven (7).
- ❖ Number of samples analyzed: Seven (7).
- ❖ Number of samples containing more than 1% asbestos: One (1).
- ❖ Number of samples containing asbestos but less than 1%: None (0).
- ❖ Laboratories Conducting Analysis and Method: Micro Analytical Services. (TDSHS License number # 30-0304), Methods – Interim 40 CFR Part 763 Appendix E to Subpart E Environmental Protection Agency (EPA), Improved EPA 600/R-93/116. 94

The potential Asbestos Containing Building Material (ACBM) samples collected (potential ACBMs that tested positive for asbestos or are assumed positive are shaded in yellow), their descriptions, and their locations are summarized in the following table:

Sample Number	Type / Condition	Well# / Location	Friable/Percent Asbestos
1-1-I-1	Loose Insulation – White Fibrous Insulation / Damaged	Northeast Metal Flanked Catch Area	Yes / None Detected
2-2-G-1	Metal Gasket Material – Rusted Non-fibrous Metal / Damaged	Southeast Tank in Northeast Berm Area	No / None Detected
3-3-G-1	Gasket Material – Black Fibrous Gasket + Beige Paint / Good	Piping in Northeast Berm Area	No / None Detected
4-4-H-1	Hose Material – Black Fibrous Hose / Good	Northeast Berm Area	No / None Detected
5-5-G-1	Gasket Material – Gray Fibrous Transite / Good	Southeast AST In Southeast Berm Area	Yes / 4% Chrysotile
6-6-G-1	Gasket Material – Green Fibrous Gasket Material / Good	Third AST from the Northwest End of Southeast Berm Area	Yes / None Detected
7-7-I-1	Tank Insulation – Dark Non-fibrous Mastic / Damaged	Third AST from the Northwest End of Southeast Berm Area	Yes / None Detected

See lab results and sample photographs attached to this letter. Under EPA 600/R-93/116; Interim 40 CFR Part 763 Appendix E to Subpart E it is not necessary to separate layers for point counting if the individual components are proportioned equally.

The inspection performed by Phase Engineering, Inc. was a suspect asbestos containing materials (ACMs) inspection for demolition purposes of the suspect materials in the tank farm area located at 606 Marlin Avenue, Freeport, Brazoria County, Texas 77541 following the National Emission Standards for Hazardous Air Pollutants (Title 40 CFR, Part 61). The inspector was provided no historical documentation of original construction or renovations of the buildings. No previous asbestos inspection reports or abatement reports were provided to the inspector. **This inspection is not intended to comply with AHERA 40 CFR 763.** All ACMs found and their homogeneous areas are assumed to be asbestos containing until a full asbestos inspection has been conducted.

#### Site Specific Details:

- The sampling protocol followed for this inspection was intended for demolition purposes of the suspect materials in the tank farm area located at 606 Marlin Avenue, Freeport, Brazoria County, Texas 77541.
- The specific square footage of each homogeneous suspect ACM area is not included as a part of this limited asbestos inspection.

Although Phase Engineering, Inc. uses trained and licensed inspectors in attempting to locate and identify materials potentially containing asbestos, Phase Engineering, Inc. does not warrant that all materials containing asbestos have been identified. It is possible that there are materials containing asbestos that were not found because they were not visible or accessible to the inspector, or for various other reasons, were not sampled. Moreover, it is possible that the actual quantities of materials will differ from the quantities of materials estimated during this survey.

Samples taken are categorized as either friable or non-friable. The term friable refers to the ease with which the material can be crumbled or made to produce dust using hand pressure alone. For example, ceiling tiles are generally considered friable, while floor tiles are generally considered non friable. Sheet rock wall materials are considered friable when damaged and non-friable when intact. The condition of the materials sampled is also categorized as good, damaged or significantly damaged.

A material is considered to be an ACM if it is composed of more than 1% asbestiform components.

#### Findings:

The results found during the asbestos inspection indicated one suspect ACMs sampled contained asbestos above 1%. The materials determined or assumed to be ACBMs are summarized in the following table:

TYPE OF MATERIAL	APPROXIMATE LOCATION OF ACBM	FRIABLE / NON-FRIABLE - CONDITION
Gray Valve Gasket	Southeast AST In Southeast Berm Area an All Gray Gaskets	Friable – Good

No other suspect ACMs analyzed were found to contain asbestos of the suspect materials in the tank farm area located at 606 Marlin Avenue, Freeport, Brazoria County, Texas 77541

#### Recommendations:

It is recommended that any ACMs or assumed ACMs, that will be disturbed, be removed by a licensed abatement contractor and if applicable, a licensed asbestos consultant. The TDSHS Demolition/Renovation Notification form can be used to meet the requirements of the National Emission Standards for Hazardous Air Pollutants, 40 CFR, Subpart M (NESHAP). These regulations require that written notification be submitted before beginning renovation projects that include the disturbance of any asbestos-containing material in a facility. A notification form is required before the demolition of a building or facility, even when no asbestos is present.

This form must be used to fulfill these requirements. Please call either 512-834-6610 or 1-800-572-5548 (within Texas), or your local regional office for assistance in completing this form.

During renovation or demolition activities, care should be exercised in dealing with all materials even those shown to be non-asbestos containing (this would include materials technically considered as non-asbestos containing because they are below the one percent limit). If these non-asbestos materials are to be disturbed work practices should be used that will limit exposure to dust and debris. Contractors performing this work should conform to OSHA regulations outlined in 29 CFR 1926.55 (exposure limits can be found in 29 CFR 1910.1000 Table Z-3).

In the event of future renovation and or demolition, further sampling may be required of suspect asbestos containing materials prior to these activities to satisfy the Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), and Texas Department of State Health Services (TDSHS) rules and regulations at that time. If suspect asbestos containing building materials (not noted during this inspection) should be found during any renovation or demolition, these materials should be sampled for asbestos and handled appropriately following all local, state and federal rules and regulations at that time.

**If improper renovation or demolition occurs the owner is subject to a \$10,000 a day fine, enforced by the Texas Department of State Health Services (TDSHS).**

Thank you for the opportunity to work with you on your environmental needs. If you have any questions, please call me at (713) 476-9844 or 1-800-419-8881.

Sincerely,

A handwritten signature in black ink, appearing to read 'Neal Barnes', is written over a horizontal line.

Neal Barnes, P.G.  
Asbestos Individual Consultant  
TDSHS License # 105626

## ASBESTOS SAMPLE PHOTOGRAPHS

Photo 1: 1-1-I-1



Photo 2: 2-1-G-1



Photo 3: 3-1-G-1



Photo 4: 4-4-H-1



Photo 5: 5-1-G-1



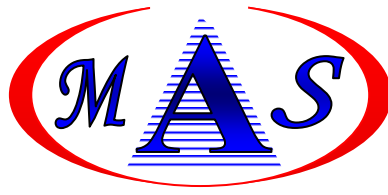
Photo 6: 6-6-G-1



Photo 7: 7-7-I-1



**ASBESTOS LABORATORY RESULTS**



*Micro Analytical Services, Inc.* 11301 Richmond Ave. Ste.K100B♦Houston♦Tx 77082♦Phone(281)497-4500♦Fax(281)497-4517

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NVLAP Lab No. 200618-0

TDSHS License No. 30-0304

## PLM BULK ASBESTOS ANALYSIS REPORT

**CLIENT:** Phase Engineering, Inc.

**MAS JOB NO.:** 8040-00

**PROJECT:** 906 Marlin

**REPORT DATE:** November 18, 2010

**IDENTIFICATION:** Asbestos, Bulk Sample Analysis, Quantitation by Visual Area Estimation

**TEST METHOD:** Polarized Light Microscopy with Dispersion Staining  
EPA Test Method 600/M4-82-020;  
Interim (40CFR Part 763 Appendix E to Subpart E)

## STATEMENT OF LABORATORY ACCREDITATION

These samples were analyzed at Micro Analytical Services, Inc. in the Asbestos Laboratory at 11301 Richmond Ave. Suite K100B, Houston, Texas, 77082. The Laboratory holds accreditation from the National Institute of Standards and Technology under the National Voluntary Laboratory Accreditation Program (NVLAP). This laboratory is also licensed and authorized to perform as an Asbestos Laboratory in the State of Texas within the purview of Texas Civil Statutes, Article 4477-3a, as amended, so long as this license is not suspended or revoked and is renewed according to the rules adopted by the Texas Board of Health.

The samples were analyzed in general accordance with the procedures outlined in the Method for the Determination of Asbestos in Bulk Building Materials, EPA/600/M4-82-020 or the U.S. Environmental Protection Agency method, under AHERA, for the analysis of asbestos in building materials by polarized light microscopy. The results of each bulk sample relate only to the material tested and the results shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

Specific questions concerning bulk sample results shall be directed to the Asbestos Bulk Laboratory at Micro Analytical Services, Inc.

**Analyst:** Tony T. Dang

**Approved Signatory:**



*Micro Analytical Services, Inc.* 11301 Richmond Ave. Ste. K100B♦Houston♦Texas 77082♦Phone(281) 497-4500♦Fax(281) 497-4517

## Polarized Light Microscopy Analysis

Phase Engineering, Inc.  
335 West 21<sup>st</sup> Street  
Houston, Texas 77008

MAS Project #: 8040-00  
Date Received: 11/17/2010  
Date Analyzed: 11/18/2010

**Project Name:** 906 Marlin

Field ID/ Lab ID	Layer #	Sample Description	Asbestos Detected? (Yes/No)	Asbestos Constituents (%)	Non-Asbestos Constituents (%)
1-1-I-1 MAS210374	1	White fibrous insulation	No		100% fibrous Glass
2-2-G-1 MAS210375	1	Rusted non-fibrous metal	No		100% Metal
3-3-G-1 MAS210376	1	Black fibrous gasket with beige paint	No		10% Synthetic 90% Rubber
4-4-H-1 MAS210377	1	Black fibrous hose	No		10% Synthetic 30% Cellulose 60% Rubber
5-5-G-1 MAS210378	1	Grey fibrous transite	Yes	25% Chrysotile	75% Other
6-6-G-1 MAS210379	1	Green fibrous gasket	No		40% Cellulose 60% Other
7-7-I-1 MAS210380	1	Dark non-fibrous mastic	No		100% Mastic

Samples have been analyzed by the EPA Interim Method 600/M4-82-020. The test results herein relate only to the sample submitted and analyzed. This report may be only reproduced in full with the approval of the Bulk Asbestos Laboratory of Micro Analytical Services (MAS), Inc. The above percentages are visual estimates of area percent. MAS is not responsible for any errors resulting from improper or incorrect sampling or shipping procedures. These samples will be retained for a period of 30 days. Accreditation by NVLAP in no way constitutes or implies product certification, approval, or endorsement by NIST. Some materials, especially floor tiles, contain asbestos fibers too thin to be detected by this method. NVLAP Lab Code: 2000618 TDSHS License: 30-0341

**Analyzed by:** Tony Dang

**Approved NVLAP Signatory:** Tony Dang  
Page 1 of 1

## **STATEMENT OF QUALIFICATIONS**



# TEXAS DEPARTMENT OF STATE HEALTH SERVICES

## PHASE ENGINEERING INC

*is certified to perform as a*

### **Asbestos Consultant Agency**

*in the State of Texas within the purview of Texas Occupations Code, chapter 1954, so long as this license is not suspended or revoked and is renewed according to the rules adopted by the Texas Board of Health.*

A handwritten signature in cursive script, reading "David Lahey MD".

DAVID LAKEY, M.D.  
COMMISSIONER OF HEALTH

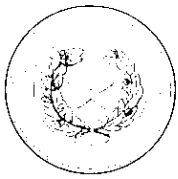
License Number: 100224

Control Number: 96277

Expiration Date: 12/26/2011

(Void After Expiration Date)

VOID IF ALTERED      NON-TRANSFERABLE



## TEXAS DEPARTMENT OF STATE HEALTH SERVICES

DAVID L. LAKEY, M.D.  
COMMISSIONER

1100 West 49th Street • Austin, Texas 78756  
P.O. Box 149347 • Austin, Texas 78714-9347  
1-888-963-7111 • [www.dshs.state.tx.us](http://www.dshs.state.tx.us)  
TTY: 1-800-735-2989

FEBRUARY 17, 2009

NEAL E BARNES  
PHASE ENGINEERING INC  
335 WEST 21ST STREET  
HOUSTON, TX 77008

This is to verify that the individual shown below holds a valid credential to practice as an ASBESTOS INDIVIDUAL CONSULTANT in the State of Texas.

NAME: NEAL E BARNES  
LICENSE TYPE: ASBESTOS INDIVIDUAL CONSULTANT  
LICENSE NUMBER: 105626  
CONTROL NUMBER: 95724  
EXPIRATION DATE: 2/10/2011

If you have any questions, please contact us by phone at 512-834-6600, by fax at 512-834-6614. We encourage you to visit our website at <http://www.dshs.state.tx.us> for frequently updated information, including rules, laws, publications and forms. You may also verify a credential through this website.

Environmental & Sanitation Licensing Group



# TEXAS DEPARTMENT OF STATE HEALTH SERVICES

## MICRO ANALYTICAL SERVICES INC

*is certified to perform as a*

**Asbestos Laboratory  
PCM, PLM**

*in the State of Texas within the purview of Texas Occupations Code, chapter 1954, so long as this license is not suspended or revoked and is renewed according to the rules adopted by the Texas Board of Health.*

A handwritten signature in black ink, reading "David Lakey MD".

DAVID LAKEY, M.D.  
COMMISSIONER OF HEALTH

License Number: 300341

Control Number: 95623

Expiration Date: 1/25/2012

(Void After Expiration Date)

VOID IF ALTERED

NON-TRANSFERABLE



**National Voluntary  
Laboratory Accreditation Program**



**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005**

**Micro Analytical Services, Inc.**  
11301 Richmond Ave., Suite K100B  
Houston, TX 77082  
Mr. Tony Dang  
Phone: 281-497-4500 Fax: 281-497-4517  
E-Mail: [tdang@mas-lab.com](mailto:tdang@mas-lab.com)  
URL: <http://www.mas-lab.com>

**BULK ASBESTOS FIBER ANALYSIS (PLM)**

**NVLAP LAB CODE 200618-0**

***NVLAP Code      Designation / Description***

18/A01	EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
--------	--

2010-01-01 through 2010-12-31

*Effective dates*

*Darryl S. Bruce*  
For the National Institute of Standards and Technology

United States Department of Commerce  
National Institute of Standards and Technology



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**Certificate of Accreditation to ISO/IEC 17025:2005**

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NVLAP LAB CODE: 200618-0

**Micro Analytical Services, Inc.**  
Houston, TX

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:*

**BULK ASBESTOS FIBER ANALYSIS**

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2010-01-01 through 2010-12-31

*Effective dates*



*Sally S. Bruce*  
For the National Institute of Standards and Technology

## LETTER OF ENGAGEMENT

# Phase Engineering, Inc.

---

*Environmental Consultants*

November 12, 2010

Mr. Tony Maag  
Columbia Environmental Services, Inc.  
13222 Reeveston Road  
Houston, Texas 77039  
713-868-4845 ext 5651 email tmaag@columbiaenviro.com

Dear Mr. Maag:

We are pleased to make the following proposal for Professional Environmental Services for the tank farm area in the property located at 906 Marlin Avenue, Freeport, Brazoria County, Texas 77541:

- **Perform an asbestos inspection to identify suspect building materials that contain asbestos by a Texas Department of Health licensed inspector for renovation purposes. Exterior and roof materials will not be sampled as part of this inspection. By signing this agreement you agree that Phase Engineering, Inc. is not liable for any damage to these areas inspected.** A minimum of three samples, of each suspect asbestos containing homogeneous building material will be taken, to satisfy the Texas Department of Health requirements for renovation/demolition of asbestos building materials. A minimum of one sample only may be required for exterior suspect asbestos containing materials sampled, if applicable. The samples will then be taken to the lab and analyzed for asbestos. It is recommended that the samples that are over one percent asbestos and under 5 percent asbestos should be point counted at the laboratory to confirm the percentage of asbestos in the building material. This analysis is more expensive than the traditional analysis (Polarized Light Microscopy) and is used when asbestos is near the one percent detection amounts. Transmission Electron Microscopy (TEM) is considered one of the most accurate methods for laboratory analysis for suspect asbestos containing building materials, however, this method is more costly and currently it is only recommended under federal regulations. Although Phase Engineering, Inc. uses trained and licensed inspectors in attempting to locate and identify materials potentially containing asbestos; Phase Engineering, Inc. does not warrant that all materials containing asbestos will be identified. It is possible that there are materials containing asbestos that were not found because they were not visible or accessible to the inspector, or for various other reasons, were not sampled.

**Quoted price for inspection with sampling: \$500.00 plus \$15.00 per sample analyzed. The amount of samples taken will depend on how many will be required, at a minimum, to satisfy the regulations for renovation/demolition.**  
**Point count analysis: \$50.00 per sample analyzed, when applicable and pre approved.**  
**Rush fees are \$750.00 for inspection plus \$30.00 per sample analyzed.**

- Includes two copies of final report with findings, conclusions and recommendations. Additional Copies @ \$50.00 each.
- Delivery: Verbal as soon as results are delivered from the laboratory. Final Report approximately 10-12 working days from receipt of laboratory results. Delivery charges may apply, not to exceed \$30.00 per delivery, unless client arranges pickup at their own expense.
- Terms: Net due upon receipt of final report.
- Insurance coverage: \$2,000,000 Professional and General Liability.

906 Marlin Avenue, Freeport, Brazoria County, Texas 77541

If the above terms and conditions are acceptable, please sign and return (fax 713 476-9797) a copy of this letter to serve as a letter of engagement and notification to proceed. The following information is needed to begin the project:

1. Access to all areas to be sampled and Contact Name & Telephone Number and Current Owner Name.
2. **Floor plans sent to our office prior to inspection. Inspection will be conducted after receipt of work plan and drawings. If project is a complete demolition these items may not be required if not available. If floor plans are not provided a \$50.00 drawing fee may apply.**
3. Entity for which the report and invoice will be addressed and delivery instructions. If no written information is provided to Phase engineering, Inc. regarding these items, the reports will be issued, billed and delivered to above.

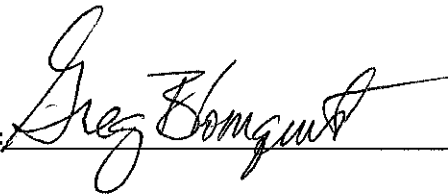
Thank you for the opportunity to work with you on your environmental needs. If you have any questions, please call me at (713) 476-9844 or 1-800-419-8881.

Sincerely,



Neal Barnes, P.G.  
Asbestos Consultant

Agreed to:



Date:

11-23-10

Default delivery is by PDF file. Initial if you prefer to have paper copies shipped. \_\_\_\_\_

•

# Permit Information

Parcel Number: 2108-0010-000

Street: 906 MARLIN City: FREEPORT State: TX Zip: 77541-

Permit #: 2010-0799 Issue Date: 12/8/2010 Expiration Date: 6/6/2011

## Permit Point of Contact

Last Name: GULFCO MARINE MAINTENA First Name: Home Phone: (512) 671-3434

Street: 906 MARLIN Work Phone:

City: FREEPORT State: TX Zip: 77541 Email:

Contractor/Architect: COLUMBIA ENVIRONMENTAL SVS. INC

## Permit Information

Permit Type: DEMO Approved: ☐ Permit Fee: \$200.00 Est. Project Cost: \$25,000.00

Project Dimensions: Version of Code:

To Clerk Date: 12/8/2010 Closure Date:

Insurance Notification Date: Insurance Receipt Date:

Temporary CoO/C Date: CoO/C Date:

Permit Issuer: MELISSA FARMER Final Inspector: KOLA OLAYIWOLA COO/C Issuer:

Final Insp. Date:

## General Comments

DEMO 12 OF THE 5,000 GALLON TANKS (60,000) WILL BE TREATED AS ONE PERMIT - EACH OF THE 3 THAT ARE 73,000 GALLONS WILL BE TREATED AS INDIVIDUAL PERMITS





200 WEST SECOND STREET / FREEPORT, TEXAS 77541 / PHONE (979) 233-3526 / FAX (979) 233-2172

## PERMIT APPLICATION

Applicant's Name: Columbia Environmental SVS, Inc.

Owners Name: GUFCO Marine Maintenance

Owners Address: 9013222 REEVES ST, Houston, TX  
77039

## JOB INFORMATION

Contractor's Name: Columbia Environmental SVS, Inc.

Work Location: 906 Marlin Ave, Freeport, Tx

Description of Job: DEMO 3x 375K TANKS (\$50.00/EA.)  
AND 14 x 300-6000 (\$50.00/group) TANKS.

Valuation of Job: \$ 25,000 Permit Fee: \$ 200.00

Type of permits needed: ☐ Building ☐ Electrical ☐ Mechanical ☐ Plumbing

☒ Demolition ☐ House moving ☐ Safety

Phone numbers: Owner of Property 512-671-3434

Contractor 281-740-6607

Plans turned in with application: ☒ Yes ☐ No INSURANCE CERT.  
Type: ☐ Drawings ☐ Prints ASBESTOS SURVEY

Date of Application: 06/06/10 TDH DEMO APPLICATION

Applicants Signature: [Signature] Tony Mary

APPROVED  
By [Signature] 12/16/2010

# Phase Engineering, Inc.

Environmental Consultants

November 16, 2010

Mr. Tony Maag  
Columbia Environmental Services, Inc.  
13222 Reeveston Road  
Houston, Texas 77039  
713-868-4845 ext 5651 email tmaag@columbiaenviro.com

RE: Asbestos Inspection for demolition purposes of the suspect materials in the tank farm area located at 606 Marlin Avenue, Freeport, Brazoria County, Texas 77541.

Dear Mr. Maag:

An asbestos inspection was conducted November 15, 2010 by Neal Barnes (TDSHS license # 10-5626) of Phase Engineering, Inc. (TDSHS license # 10-0224) in accordance with the National Emission Standards for Hazardous Air Pollutants (Title 40, CFR, Part 61) of the suspect materials in the tank farm area located at 606 Marlin Avenue, Freeport, Brazoria County, Texas 77541 as described within the report to follow. Greater than 1% asbestos was detected in gray valve gasket material. No other asbestos greater than 1% was detected in the suspect asbestos containing building materials sampled and analyzed within the areas subject to renovation.

If the facility is to be demolished or renovated it is recommended that any ACBMs or assumed ACBMs that will be disturbed be removed by a licensed abatement contractor and if applicable, a licensed asbestos consultant. The TDSHS Demolition/Renovation Notification form combines the requirements of the National Emission Standards for Hazardous Air Pollutants, 40 CFR, Subpart M (NESHAP) and the Texas Asbestos Health Protection Rules (TAHPR). Both of these regulations require that written notification be submitted before beginning renovation projects that include the disturbance of any asbestos-containing material in a facility. A notification form is required before the demolition of a building or facility, even when no asbestos is present. This form must be used to fulfill either of these requirements. Please call either 512-834-6610 or 1-800-572-5548 (within Texas), or your local regional office for assistance in completing this form.

During renovation or demolition activities, care should be exercised in dealing with all construction materials even those shown to be non-asbestos containing (this would include materials technically considered as non-asbestos containing because they are below the one percent limit). If these non-asbestos materials are to be disturbed work practices should be used that will limit exposure to dust and debris. Contractors performing this work should conform to OSHA regulations outlined in 29 CFR 1926.55 (exposure limits can be found in 29 CFR 1910.1000 Table Z-3).

During renovation or demolition activities it is required to have a copy of the asbestos inspection report available during all phases of the renovation or demolition. If you should have any questions or comments concerning the inspection or this letter please call me at (713) 476-9844 or (800) 419-8881. We appreciate you using Phase Engineering, Inc. professional environmental services and look forward to serving you again in the near future.

Sincerely,



Neal Barnes, P.G.  
Asbestos Consultant  
TDSHS License # 105626

For Office Use Only:

Notification #: \_\_\_\_\_

## ASBESTOS/DEMOLITION NOTIFICATION FORM

**DO NOT WRITE IN THIS BOX- FOR DEPARTMENT USE ONLY**

Date received: \_\_\_\_/\_\_\_\_/\_\_\_\_ Postmark date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Walk-in date: \_\_\_\_/\_\_\_\_/\_\_\_\_

### TYPE OF NOTIFICATION: (Select one and fill in the requested information)

☒ **ORIGINAL** ☐ **AMENDMENT No. \_\_\_\_** ☐ **CANCELLATION**

☐ **EMERGENCY**

• Was emergency request made to the Regional Office or Environmental Health Notifications Group (EHNG) by phone?

☐ Yes ☐ No

• If yes, the DSHS reference #: \_\_\_\_\_ and name of the Regional or EHNG representative with whom you spoke? \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_ a.m. ☐ p.m.

• Describe the reason for Emergency: \_\_\_\_\_

☐ **ORDERED: (For structurally unsound facilities, attach copy of demolition order and identify Governmental Official)**

Name: \_\_\_\_\_ Registration No. \_\_\_\_\_

Title: \_\_\_\_\_

Date of order (MM/DD/YY): \_\_\_\_/\_\_\_\_/\_\_\_\_ Date order to begin (MM/DD/YY): \_\_\_\_/\_\_\_\_/\_\_\_\_

(x)  
below if  
mended

**AMENDMENTS:** You must complete the entire form and mark the appropriate check box(es) along the left-hand side of this form to indicate amended information.

### TYPE OF WORK

☐ Asbestos Abatement ☒ Demolition ☐ Annual Consolidated O&M ☐ Abatement/Demolition

Is this a phased project? ☐ Yes ☒ No

### FACILITY INFORMATION

#### 1. Facility Location

☒ ..... Description or Facility Name: **Former Gulfco Marine Maintance Facility**

☒ ..... Physical Address: **906 marlin Ave**

☒ ..... County: **Brazoria** City: **Freeport** Zip: **77541**

☒ ..... Facility Contact: **Tony Maag** Phone #: **(281) 740-6607**

#### 2. Type of Facility (Select one)

☐ Public ☐ Federal ☐ Industrial/Manufacturing ☒ NESHA-Only ☐ Public School K-12

#### 3. Facility Details

☐ ..... Description of Area/Room Number: **Tank Demo**

☐ ..... Age of Building: **30+** Size: **30K SF** Number of Floors: **1**

☐ ..... Is this building occupied? ☐ Yes ☒ No

☐ ..... Prior Use: **Mantiance Facility TANK FARM**

☐ ..... Future Use: **Abandon**

☐ ..... Date of Asbestos Survey/NESHA Inspection: **11/16/10**

☐ ..... DSHS Inspector License #: **105626**

☐ ..... Analytical Method: ☒ PLM ☐ TEM ☐ Assumed Asbestos ☐ No Suspect Material

☐ ..... DSHS Laboratory License #: **30-0340**

**WORK SCHEDULE/ASBESTOS AMOUNTS** (Note: if the start date(s) entered below cannot be met, the DSHS Regional or Local Program office must be notified prior to the scheduled start date. Failure to do so is a violation of TAPPA Section 295.61.)

#### 1. Asbestos Abatement Work Schedule:

☐ ..... Start date: \_\_\_\_/\_\_\_\_/\_\_\_\_ and End date: \_\_\_\_/\_\_\_\_/\_\_\_\_

☐ ..... Work days: ☐ Mon. ☐ Tues. ☐ Wed. ☐ Thurs. ☐ Fri. ☐ Sat. ☐ Sun.

☐ ..... Working hours: \_\_\_\_ a.m. ☐ p.m. to \_\_\_\_ a.m. ☐ p.m.

#### 2. Demolition Work Schedule:

☐ ..... Start date: **12/08/10** and End date: **01/06/11**

☐ ..... Work days: ☒ Mon. ☒ Tues. ☒ Wed. ☒ Thurs. ☒ Fri. ☐ Sat. ☐ Sun.

☐ ..... Working hours: **7:00** a.m. ☐ p.m. to **6:00** a.m. ☒ p.m.

(x)  
Below if  
amended

### C. ASBESTOS AMOUNTS

☐ ..... Is Asbestos Present? ☒ Yes ☐ No (Complete the table below if asbestos is present)

Asbestos-Containing Building Material Type	Approximate amount of Asbestos						
	Pipes	Ln Ft	Ln M	Surface Area	SQ Ft	SQ M	Cu Ft
<i>*Only mark the boxes below on this chart if they are being amended</i>							
<input checked="" type="checkbox"/> RACM to be removed		<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> RACM left in place during demolition		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Interior Category I non-friable removed		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Exterior Category I non-friable removed		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Category I non-friable left in place during demolition		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Interior Category II non-friable removed		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Exterior Category II non-friable removed		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Category II non-friable left in place during demolition		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> RACM Off-Facility Component							

### DESCRIPTION OF WORK PRACTICES AND PROCEDURES

☐ ..... 1. Description of procedures to be followed in the event that unexpected asbestos is found or previously non-friable asbestos material becomes crumbled, pulverized, or reduced to powder: TDH Rules will apply

☐ ..... 2. Description of planned demolition or abatement work, type of material, and method(s) to be used: Cut up and remove  
nks  
and removal of 2 square feet of gasket material

☐ ..... 3. Description of work practices and engineering controls to be used to prevent emissions of asbestos at the demolition site:  
Wear proper PPE, cut flage off and drum for disposal

### PROJECT INFORMATION

☐ ..... A. FACILITY OWNER  
Facility Owner Name: LDL Coastal LP  
Phone #: (281) 740-6607  
Attention: c/o Tony Maag  
Mailing Address: 13222 Reeveston  
City: Houston State: TX Zip: 77039

☐ ..... B. ASBESTOS ABATEMENT CONTRACTOR #1  
DSHS Asbestos Contractor License #: NA  
Contractor Name: NA  
Address: NA  
City: NA State: NA Zip: NA  
Office Phone #: ( ) - Job-Site Phone #: ( ) -

☐ ..... C. ASBESTOS ABATEMENT CONTRACTOR #2 (Only if there is more than one Contractor)  
DSHS Asbestos Contractor License #: NA  
Contractor Name: NA  
Address: NA  
City: NA State: NA Zip: NA  
Office Phone #: (NA) - Job-Site Phone #: (NA) -

### D. ASBESTOS SUPERVISOR

☐ ..... DSHS Supervisor License #: NA Site Supervisor: \_\_\_\_\_  
☐ ..... DSHS Supervisor License #: \_\_\_\_\_ Site Supervisor: \_\_\_\_\_

(x)

below if

mended **E. NESHAP TRAINED INDIVIDUAL**

☐ ..... NESHAP Trained Individual: NA  
Certification Date:   /  /  

☐ ..... **F. DEMOLITION CONTRACTOR**

Demolition Contractor: Effective Environmental, Inc.  
Address: 2515 S. Beltline Rd  
City: Mesquite State: TX Zip: 75181 Phone #: (972) 329-1200

☐ ..... **G. PROJECT CONSULTANT OR OPERATOR**

DSHS License No.: 10-5519  
Project Consultant or Operator: Enercon  
Address: 12100 Ford Rd, Ste 200  
City: Dallas State: TX Zip: 75234 Phone #: (972) 484-3854

☐ ..... **H. Waste Transporter**

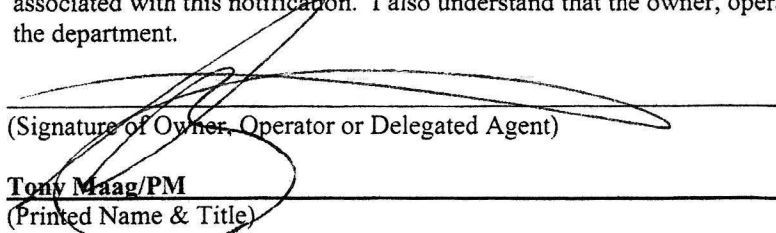
DSHS Waste Transporter License #:             
Waste Transporter: to be determined  
Address:             
City:            State:            Zip:             
Contact Person:            Phone #: (    )    -   

☐ ..... **I. Waste Disposal Site**

TCEQ Permit #: 1721A  
Waste Disposal Site: Waste Managment  
Address: 19818 E Highway 6  
City: Alvin State: TX Zip: 77511  
Phone #: (713) 423-1714

**CERTIFICATION STATEMENT**

I hereby declare that I have examined this notification and, to the best of my knowledge and belief, all information provided is complete, true, and correct. I affirm that I am the owner, operator, or delegated agent and that I am responsible for the fee associated with this notification. I also understand that the owner, operator, or delegated agent is responsible for notification to the department.

  
(Signature of Owner, Operator or Delegated Agent)

Date: 11/25/10

Tony Maag/PM  
(Printed Name & Title)

E-mail Address: tmaag@columbiaenviro.com Phone #: (281) 740-6607

**IMPORTANT INFORMATION**

**NOTIFICATION TIMELINESS REQUIREMENT:**

Your Asbestos/Demolition Notification form must be postmarked no less than ten working days (not calendar days) prior to the start of any asbestos abatement or demolition.

**FILING FEE:** An invoice will be mailed to the facility owner upon completion of the project.

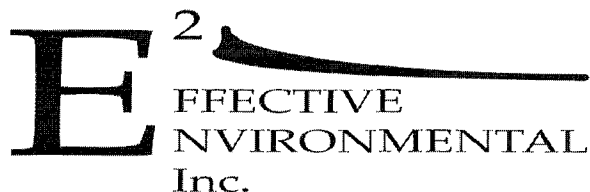
**CALL FOR ASSISTANCE:** (512) 834-6747 or (888) 778-9440 (toll free in Texas)

**MAIL FORM TO:**

ENVIRONMENTAL HEALTH NOTIFICATIONS GROUP  
TEXAS DEPARTMENT OF STATE HEALTH SERVICES  
PO BOX 143538  
AUSTIN, TX 78714-3538

**APPENDIX F**

**TANK CERTIFICATES OF DESTRUCTION**



February 22, 2011

Eric Pastor  
Pastor, Behling & Wheeler, LLC  
2201 Double Creek Drive, Suite 4004  
Round Rock, Texas 78664  
Phone: 512-671-3434  
Email: [eric.pastor@pbwllc.com](mailto:eric.pastor@pbwllc.com)

Subject: Tank Destruction Certificate  
Former Gulfco Superfund Site  
LDL Coastal, LP

Effective Environmental, Inc. (E2) does hereby certify that the following tank with the associated volume was demolished on site and the material was sent to Proler Southwest, Inc. at 90 Hirsch Road in Houston, Texas for recycling. The demolition was done in accordance with the Work Implementation Plan for the project. The scrap delivery tickets are being submitted as a package. The shipments were not specific to each tank or tank numbers.

Tank No. 2

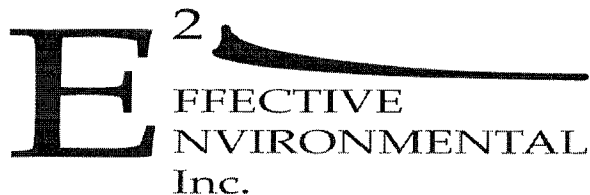
Capacity: 7,500 gal

Certified by:

Greg Blomquist

2515 S. Beltline Rd.  
Mesquite, TX 75181  
Phone: 972 329 1200  
Fax: 972 329 1206

9950 Chemical Road  
Houston, TX 77507  
Phone: 713 672 6100  
Fax: 713 672 6101



February 22, 2011

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Email: [eric.pastor@pbwllc.com](mailto:eric.pastor@pbwllc.com)

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Tank No. 4

Capacity: 28,700 gal

Certified by:

Greg Blomquist

2515 S. Beltline Rd.  
Mesquite, TX 75181  
Phone: 972 329 1200  
Fax: 972 329 1206

9950 Chemical Road  
Houston, TX 77507  
Phone: 713 672 6100  
Fax: 713 672 6101



February 22, 2011

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LDL Coastal, LP

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Tank No. 6

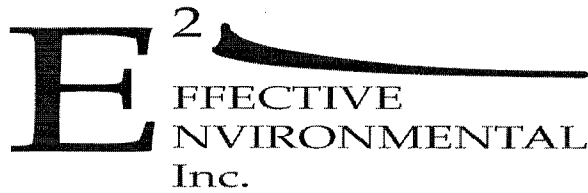
Capacity: 31,000 gal

Certified by:

Greg Blomquist

2515 S. Beltline Rd.  
Mesquite, TX 75181  
Phone: 972 329 1200  
Fax: 972 329 1206

9950 Chemical Road  
Houston, TX 77507  
Phone: 713 672 6100  
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Email: [eric.pastor@pbwllc.com](mailto:eric.pastor@pbwllc.com)

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LDL Coastal, LP

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Tank No. 10

Capacity: 3,400 gal

Certified by:

Greg Blomquist

2515 S. Beltline Rd.  
Mesquite, TX 75181  
Phone: 972 329 1200  
Fax: 972 329 1206

9950 Chemical Road  
Houston, TX 77507  
Phone: 713 672 6100  
Fax: 713 672 6101



February 22, 2011

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Round Rock, Texas 78664  
Phone: 512-671-3434  
Email: [eric.pastor@pbwllc.com](mailto:eric.pastor@pbwllc.com)

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LDL Coastal, LP

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Tank No. 13

Capacity: 6,000 gal

Certified by:

Greg Blomquist

2515 S. Beltline Rd.  
Mesquite, TX 75181  
Phone: 972 329 1200  
Fax: 972 329 1206

9950 Chemical Road  
Houston, TX 77507  
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Tank No. 14

Capacity: 10,000 gal

Certified by:

A handwritten signature in cursive script, reading 'Greg Blomquist', is written over a horizontal line.

Greg Blomquist

2515 S. Beltline Rd.  
Mesquite, TX 75181  
Phone: 972 329 1200  
Fax: 972 329 1206

9950 Chemical Road  
Houston, TX 77507  
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2201 Double Creek Drive, Suite 4004  
Round Rock, Texas 78664  
Phone: 512-671-3434  
Email: [eric.pastor@pbwllc.com](mailto:eric.pastor@pbwllc.com)

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Tank No. 15

Capacity: 73,500 gal

Certified by:

Greg Blomquist

2515 S. Beltline Rd.  
Mesquite, TX 75181  
Phone: 972 329 1200  
Fax: 972 329 1206

9950 Chemical Road  
Houston, TX 77507  
Phone: 713 672 6100  
Fax: 713 672 6101



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2201 Double Creek Drive, Suite 4004  
Round Rock, Texas 78664  
Phone: 512-671-3434  
Email: [eric.pastor@pbwllc.com](mailto:eric.pastor@pbwllc.com)

Subject: Tank Destruction Certificate  
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LDL Coastal, LP

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Tank No. 16

Capacity: 5,000 gal

Certified by:

A handwritten signature in cursive script, reading 'Greg Blomquist', is written over a horizontal line.

Greg Blomquist

2515 S. Beltline Rd.  
Mesquite, TX 75181  
Phone: 972 329 1200  
Fax: 972 329 1206

9950 Chemical Road  
Houston, TX 77507  
Phone: 713 672 6100  
Fax: 713 672 6101



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Round Rock, Texas 78664  
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Email: [eric.pastor@pbwllc.com](mailto:eric.pastor@pbwllc.com)

Subject: Tank Destruction Certificate  
Former Gulfco Superfund Site  
LDL Coastal, LP

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Tank No. 17

Capacity: 4,000 gal

Certified by:

A handwritten signature in cursive script, reading 'Greg Blomquist', is written over a horizontal line.

Greg Blomquist

2515 S. Beltline Rd.  
Mesquite, TX 75181  
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Fax: 972 329 1206

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February 22, 2011

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Round Rock, Texas 78664  
Phone: 512-671-3434  
Email: [eric.pastor@pbwllc.com](mailto:eric.pastor@pbwllc.com)

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Former Gulfco Superfund Site  
LDL Coastal, LP

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Tank No. 18

Capacity: 3,000 gal

Certified by:

A handwritten signature in cursive script, reading 'Greg Blomquist', is written over a horizontal line.

Greg Blomquist

2515 S. Beltline Rd.  
Mesquite, TX 75181  
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Fax: 972 329 1206

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Email: [eric.pastor@pbwllc.com](mailto:eric.pastor@pbwllc.com)

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Tank No. 19

Capacity: 73,500 gal

Certified by:

Greg Blomquist

2515 S. Beltline Rd.  
Mesquite, TX 75181  
Phone: 972 329 1200  
Fax: 972 329 1206

9950 Chemical Road  
Houston, TX 77507  
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Email: [eric.pastor@pbwllc.com](mailto:eric.pastor@pbwllc.com)

Subject: Tank Destruction Certificate  
Former Gulfco Superfund Site  
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Tank No. 21

Capacity: 73,500 gal

Certified by:

A handwritten signature in cursive script, reading 'Greg Blomquist', is written over a horizontal line.

Greg Blomquist

2515 S. Beltline Rd.  
Mesquite, TX 75181  
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9950 Chemical Road  
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Phone: 512-671-3434  
Email: [eric.pastor@pbwllc.com](mailto:eric.pastor@pbwllc.com)

Subject: Tank Destruction Certificate  
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Tank No. 22

Capacity: 6,000 gal

Certified by:

Greg Blomquist

2515 S. Beltline Rd.  
Mesquite, TX 75181  
Phone: 972 329 1200  
Fax: 972 329 1206

9950 Chemical Road  
Houston, TX 77507  
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February 22, 2011

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Email: [eric.pastor@pbwllc.com](mailto:eric.pastor@pbwllc.com)

Subject: Tank Destruction Certificate  
Former Gulfco Superfund Site  
LDL Coastal, LP

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Tank No. 23

Capacity: 500 gal

Certified by:

Greg Blomquist

2515 S. Beltline Rd.  
Mesquite, TX 75181  
Phone: 972 329 1200  
Fax: 972 329 1206

9950 Chemical Road  
Houston, TX 77507  
Phone: 713 672 6100  
Fax: 713 672 6101

## **APPENDIX G**

### **NORTH CONTAINMENT AREA SOIL EXCAVATION APPROACH DOCUMENTATION**

**Eric Pastor**

---

**From:** Miller.Garyg@epamail.epa.gov  
**Sent:** Friday, January 07, 2011 4:21 PM  
**To:** Eric Pastor  
**Cc:** Voskov, Luda; Sanchez.Carlos@epamail.epa.gov; Nann.Barbara@epamail.epa.gov; Bhattacharya.Dipanjana@epamail.epa.gov; Shade.Kevin@epamail.epa.gov; Roddy.Susan@epamail.epa.gov  
**Subject:** Re: Proposed Approach to Address Gulfco Tank Farm North Containment Area  
**Attachments:** Tank Content Concentrations.pdf; AST Tank Farm Containment Area Soil Excavation Comparison Criteria.pdf; Figure 1 - Tank Farm Map.pdf; NEDR Figure 3 - Well Locations.pdf; Table 24 - Zone A Groundwater Exceedences.pdf

Eric,

The proposed plan below to address the Gulfco Tank Farm north containment area is approved. FYI, EPA's contractors will be on-site and plan to collect sample splits for the verification samples.

Regards,

Gary Miller, P.E.  
 Remediation Project Manager  
 EPA Region 6 - Superfund (6SF-RA)  
 (214) 665-8318  
 miller.garyg@epa.gov

---

**From:** "Eric Pastor" <eric.pastor@pbwllc.com>  
**To:** Garyg Miller/R6/USEPA/US@EPA  
**Date:** 01/07/2011 10:45 AM  
**Subject:** Proposed Approach to Address Gulfco Tank Farm North Containment Area

---

Hi Gary –

As you know from our previous communications, during the performance of the time critical removal action at the former Gulfco tank farm area, we recently observed that the north containment area floor was constructed of a compacted caliche base material rather than concrete as was previously thought (the south containment area floor was constructed of concrete as anticipated). As indicated in my e-mail to you on December 23, 2010, visible staining of this north containment area caliche floor below the footprint of Tank No. 6 was observed when that tank was removed. In addition, we have recently observed smaller isolated areas of staining below Tank Nos. 2, 15, and 21 in the north containment area (see attached Figure 1 - tank farm map for locations).

In accordance with our previous communications, I am sending this e-mail to outline our proposed plan for addressing the areas of observed impacts to the north containment area floor and decontaminating that area prior

2/23/2011

to demolishing sections of the containment area dikes as described in the removal action work plan. I would greatly appreciate it if you could review and comment on these proposed activities at your earliest convenience, so we may proceed with their implementation as soon as possible.

Specifically, we propose to perform the following:

- 1) Focused areas of the caliche floor below the former footprints of Tank Nos. 2, 6, 15 and 21 where visible staining is observed will be excavated. As practical, we propose to excavate the caliche floor and underlying soils as necessary until no visible staining is observed at the floors and walls of each excavated area. In addition, we will scrap and remove the upper approximately two inches of the caliche floor from the balance of the north containment area.
- 2) Excavated soil and caliche will be placed in water-tight roll-off bins staged near the excavation area. One or more representative samples of the excavated material will be collected by the remediation contractor for waste classification and profiling. Following completion of sample analyses and profiling, the excavated material will be shipped off-site for management at one of the facilities specified in Table 6 of the removal action work plan, or an alternative facility certified in advance by EPA as described in the Settlement Agreement.
- 3) Upon reaching the above excavation goal, we will collect verification samples of the caliche floor and/or underlying soil. Specific numbers and locations of verification samples will be selected in the field based on the areas, sizes and configurations of the areas excavated. For planning purposes, it is anticipated that two samples will be collected from the Tank No. 6 footprint and one sample will be collected from each of the Tank Nos. 2, 15, and 21 footprints. These samples will be analyzed for the project volatile organic compound (VOC) and semivolatile organic compound (SVOC) analytes listed in the attached Table 1. Sampling and analytical procedures will be as specified in the Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP). Level III analyses and validation will be performed. Analytical results will be compared to the comparison criteria listed in the attached Table 1 on an individual or statistical basis in accordance with EPA guidance. As indicated in Table 1, the comparison criteria are the lower of EPA and TCEQ risk-based screening values for direct contact with soil by industrial/commercial workers.
- 4) In the event that some areas can not practically be excavated such that visible staining is removed or the extent of impacted caliche/soil is anticipated to preclude effective remediation by excavation, we will contact you to discuss potential in-place remediation options. Pending that discussion and with EPA's concurrence, we will excavate as much material as appropriate and collect verification samples to document VOC and SVOC concentrations in the residual (i.e., post-excavation) soil/caliche.
- 5) Similarly, in the event that the comparison of verification samples described above indicates that residual soil/caliche concentrations exceed comparison criteria, we will contact you to discuss potential in-place remediation options. Pending that discussion and EPA's input, we will propose additional remediation activities for EPA review.
- 6) Following completion of the above excavation and sampling activities, backfilling of excavated areas will be performed as necessary to minimize the potential for accumulation of rainfall in low spots. Containment area berms will subsequently be demolished in accordance with the removal action work plan.

As we discussed and as shown on the attached Figure 3 from the previously submitted Nature and Extent Data Report (NEDR), three monitoring wells (SE6MW09, SF5MW10 and SF6MW11) are located immediately adjacent to or within 50 feet of the north containment area. As part of the RI, samples from these wells were analyzed for the full suite of Site chemicals of interest (COIs). As indicated on page 4 in the attached Table 24 from the NEDR, the only COIs detected in these samples at concentrations exceeding groundwater extent evaluation comparison values were very low and estimated (i.e., J-flagged) concentrations of silver (SE6MW09 and SF6MW11) and gamma-BHC (Lindane) (SF5MW10), neither of which were detected in samples from Tank Nos. 2, 6, 15, and 21 as shown on the attached Table 1 from the removal action work plan.

Thanks for reviewing this description of our proposed work. Please let me know if you have any comments/revisions or need any additional information before we proceed.

Eric Pastor  
Pastor, Behling & Wheeler, LLC  
2201 Double Creek Drive, Suite 4004  
Round Rock, Texas 78664  
512-671-3434

**Table 1**  
**Gulfco Former AST Tank Farm**  
**Tank Sample - RCI/Toxicity Data**

Tank No.	Sample ID.	Physical Description	pH	Reactivity Sulfide	Reactivity Cyanide	Flashpoint	Arsenic	Barium	Benzene	Cadmium	Carbon Tetrachloride
				ppm	ppm	Deg. F.	mg/L	mg/L	mg/L	mg/L	mg/L
Tank No. 2	TK-2-O	Aqueous Phase	NA	NA	NA	NA	<0.0024	12.1	<0.177	NA	NA
	TK-2-O	Organic Phase	5.95	112	<250	>212	<0.0024	8.19	0.415 J	0.0033 B	<0.013
	TK-2-S	Solids- sand, debris, etc.	NA	NA	NA	NA	<0.0024	2.82	24.1	0.0038 B	<0.256
Tank No. 4	TK-4-A	Oily Water	7.4	<96	<250	>212	<0.0024	29.7	<0.000177	0.016	<0.000336
Tank No. 6	TK-6-S	Rust Solids	NA	NA	NA	NA	<0.0024	0.89 B	<0.009	0.002 B	<0.00512
Tank No. 13	TK-13-O	Oily sludge	6.89	80	<250	>212	<0.0024	0.27 B	13.8	<0.00022	<0.128
Tank No. 14	None	Empty (2 in. of rust solids)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tank No. 15	TK-15-O	Oily sludge	6.38	<80	<250	126	<0.0024	0.22 B	5.3	<0.00022	<0.00512
Tank No. 16	TK-16-O	Oily sludge	6.31	<80	<250	>212	<0.0024	0.39 B	<0.009	<0.00022	<0.00512
Tank No. 17	TK-17-S	Rust solids	NA	NA	NA	NA	<0.0024	0.56 B	<0.009	0.0012 B	<0.00512
Tank No. 18	TK-18-O	Light Organic Phase	3.37	<417	<250	90	<0.024	0.53 B	<9	<0.0022	<5.12
Tank No. 19	TK-19-O	Oily sludge	6.75	216	<250	104	<0.0024	1.33	<4.5	<0.00022	<2.56
Tank No. 21	TK-21-A	Oily water	8.5	<80	<250	>212	<0.0024	0.0021 B	51.6 J	<0.00022	<5.12
Tank No. 22	TK-22-O	Oily sludge	6.74	<80	<250	>212	<0.0024	0.28 B	<0.009	<0.00022	<0.00512
Tank No. 23	TK-23-O (mg/kg)	Appears to be diesel	6.72	160	<250	126	<0.16	0.26B	<2.08	<0.013	<2.4
North Containment Area	Dike North	Water	NA	NA	NA	NA	0.012	1.17	0.011	<0.00019	0.00889 J
South Containment Area	Dike South	Water	NA	NA	NA	NA	0.024	0.49	0.015	<0.00019	<0.000336
Hazardous Criteria			<= 2 or >= 12.5	>= 500	>= 250	<140	5	100	0.5	1	0.5

**Table 1**  
**Gulfco Former AST Tank Farm**  
**Tank Sample - RCI/Toxicity Data**

Tank No.	Sample ID.	Physical Description	Chlordane	Chlorobenzene	Chloroform	Chromium	o-Cresol	m,p-Cresol	Cresol	1,2-Dichloroethane	1,4-Dichlorobenzene	2,4'-D
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Tank No. 2	TK-2-O	Aqueous Phase	NA	<0.162	1.5 J	0.16	<0.409	<0.368	NA	7.97	<0.0538	NA
	TK-2-O	Organic Phase	<0.00008	<0.021	2.25	<0.0012	<0.0012	<0.0014	<0.003	8.4	<0.0011	<0.0027
	TK-2-S	Solids- sand, debris, etc.	<0.00008	<0.426	20.7	0.0045 B	0.00275 J	<0.0014	0.00414 J	203	<0.0011	<0.0027
Tank No. 4	TK-4-A	Oily Water	NA	<0.000162	<0.00018	<0.0012	<0.00327	<0.00295	NA	<0.000176	<0.000538	<0.00027
Tank No. 6	TK-6-S	Rust Solids	<0.00008	<0.00852	<0.00776	<0.0012	<0.0012	<0.0014	<0.003	<0.0082	<0.0011	<0.0027
Tank No. 13	TK-13-O	Oily sludge	<0.00008	<0.213	1.32 J	<0.0012	<0.0012	0.00143 J	<0.003	2.73 J	<0.0011	<0.0027
Tank No. 14	None	Empty (2 in. of rust solids)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tank No. 15	TK-15-O	Oily sludge	<0.00008	<0.00852	<0.00776	<0.0012	<0.013 J	<0.0014	0.013 J	<0.0082	<0.0011	<0.0027
Tank No. 16	TK-16-O	Oily sludge	<0.00008	<0.00852	<0.00776	<0.0012	<0.0012	0.037 J	0.037 J	<0.0082	<0.0011	<0.0027
Tank No. 17	TK-17-S	Rust solids	<0.0004	<0.00852	<0.00776	<0.0012	<0.0012	<0.0014	<0.003	<0.0082	<0.0011	<0.0027
Tank No. 18	TK-18-O	Light Organic Phase	<0.01431	<8.52	216	<0.012	<0.1764	<0.2134	<0.444	<8.2	<0.1577	<0.0027
Tank No. 19	TK-19-O	Oily sludge	<0.00008	<4.26	<3.88	<0.0012	0.0046 J	<0.0014	0.00486 J	<4.1	<0.0011	<0.0027
Tank No. 21	TK-21-A	Oily water	<0.00008	<8.52	2100	<0.0012	<0.0012	<0.0014	<0.003	224	<0.0011	<0.0027
Tank No. 22	TK-22-O	Oily sludge	<0.00008	<0.00852	<0.00776	<0.0012	<0.0012	0.00364 J	0.00364 J	<0.0082	<0.0011	<0.0027
Tank No. 23	TK-23-O (mg/kg)	Appears to be diesel	NA	<3.31	<2.83	<0.049	NA	NA	NA	<2.28	<8.44	NA
North Containment Area	Dike North	Water	NA	<0.000324	0.095	0.0028 B	<0.000327	<0.000295	NA	0.045	<0.00108	<0.0027
South Containment Area	Dike South	Water	NA	<0.000162	0.03	0.0031 B	<0.000327	<0.000295	NA	0.00304 J	<0.000538	<0.00027
Hazardous Criteria			0.03	100	6	5	200	200	200	0.5	7.5	10

**Table 1**  
**Gulfco Former AST Tank Farm**  
**Tank Sample - RCI/Toxicity Data**

Tank No.	Sample ID.	Physical Description	1,1-Dichloroethene	2,4-Dinitrotoluene	Endrin	Heptachlor	Heptachlor Epoxide	Hexachlorobenzene	Hexachlorobutadiene	Hexachloroethane	Lead
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Tank No. 2	TK-2-O	Aqueous Phase	<0.205	<0.579	NA	NA	NA	<0.32	<0.45	<1.05	<0.0013
	TK-2-O	Organic Phase	<0.023	<0.0036	<0.00007	<0.00004	<0.00005	<0.0015	<0.0017	<0.0016	0.043 B
	TK-2-S	Solids- sand, debris, etc.	<0.458	<0.0036	<0.00007	<0.00004	<0.0005	<0.0015	<0.0017	<0.0016	0.0084 B
Tank No. 4	TK-4-A	Oily Water	<0.000205	<0.00464	<0.0000832	<0.0000439	0.00065	<0.00256	<0.00045	<0.00842	0.28
Tank No. 6	TK-6-S	Rust Solids	<0.00916	<0.0036	<0.00007	<0.00004	<0.00005	<0.0015	<0.0017	<0.0016	0.0028 B
Tank No. 13	TK-13-O	Oily sludge	<0.229	<0.0036	<0.00007	<0.00004	0.00057	<0.0015	<0.0017	<0.0016	0.0035 B
Tank No. 14	None	Empty (2 in. of rust solids)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tank No. 15	TK-15-O	Oily sludge	<0.00916	<0.0036	<0.00007	<0.00004	<0.00005	<0.0015	<0.0017	<0.0016	<0.0013
Tank No. 16	TK-16-O	Oily sludge	<0.00916	<0.0036	<0.00007	<0.00004	<0.00005	<0.0015	<0.0017	<0.0016	<0.0013
Tank No. 17	TK-17-S	Rust solids	<0.00916	<0.0036	<0.00033	<0.00019	<0.00024	<0.0015	<0.0017	<0.0016	0.022 B
Tank No. 18	TK-18-O	Light Organic Phase	<9.16	<0.5339	<0.01182	0.029 J	<0.00862	<0.2179	<0.248	<0.2358	<0.013
Tank No. 19	TK-19-O	Oily sludge	<4.58	<0.0036	<0.00007	<0.00004	<0.00005	<0.0015	<0.0017	<0.0016	0.0056 B
Tank No. 21	TK-21-A	Oily water	<9.16	<0.0036	<0.00007	<0.00004	<0.00005	<0.0015	<0.0017	<0.0016	<0.0013
Tank No. 22	TK-22-O	Oily sludge	<0.00916	<0.0036	<0.00007	<0.00004	<0.00005	<0.0015	<0.0017	<0.0016	<0.0013
Tank No. 23	TK-23-O (mg/kg)	Appears to be diesel	<3.19	NA	NA	NA	NA	NA	<24.9	NA	<0.097
North Containment Area	Dike North	Water	<0.000411	<0.000464	<0.00000832	<0.00000439	<0.00000732	<0.000256	<0.0009	<0.000842	<0.0013
South Containment Area	Dike South	Water	<0.000205	<0.000464	<0.00000832	<0.00000439	0.0000329	<0.000256	<0.00045	<0.000842	0.0044 B
Hazardous Criteria			0.7	0.13	0.02	0.008	0.008	0.13	0.5	3	5

**Table 1**  
**Gulfco Former AST Tank Farm**  
**Tank Sample - RCI/Toxicity Data**

Tank No.	Sample ID.	Physical Description	Lindane mg/L	Mercury mg/L	Methoxychlor mg/L	MEK mg/L	Nitrobenzene mg/L	Pentachlorophenol mg/L	Pyridine mg/L	Selenium mg/L	Silver mg/L
Tank No. 2	TK-2-O	Aqueous Phase	<0.00003	0.00004	NA	13.4	<0.452	<1.33	<0.437	0.03 B	<0.0006
	TK-2-O	Organic Phase	<0.00003	0.00037	<0.00032	9.77	<0.0008	<0.0037	<0.0182	<0.0046	<0.0006
	TK-2-S	Solids- sand, debris, etc.	<0.00003	0.00014 B	<0.00032	30	<0.0008	<0.0037	<0.0182	<0.0046	<0.0006
Tank No. 4	TK-4-A	Oily Water	0.00035	0.00017 B	0.0018 J	0.011	<0.00362	<0.011	<0.00349	<0.0046	<0.0006
Tank No. 6	TK-6-S	Rust Solids	<0.00003	0.00013 B	<0.00032	<0.017	<0.0008	<0.0037	<0.0182	0.014 B	<0.0006
Tank No. 13	TK-13-O	Oily sludge	<0.00003	0.00012 B	<0.00032	<0.429	<0.0008	<0.0037	<0.0182	0.006 B	<0.0006
Tank No. 14	None	Empty (2 in. of rust solids)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tank No. 15	TK-15-O	Oily sludge	<0.00003	0.00039	<0.00032	0.085 J	<0.0008	<0.0037	<0.0182	0.0095 B	<0.0006
Tank No. 16	TK-16-O	Oily sludge	<0.00003	0.00011 B	<0.00032	0.367	<0.0008	<0.0037	<0.0182	0.013 B	<0.0006
Tank No. 17	TK-17-S	Rust solids	0.0185	0.00015 B	<0.00162	<0.017	<0.0008	<0.0037	<0.0182	<0.0046	<0.0006
Tank No. 18	TK-18-O	Light Organic Phase	<0.00556	<0.0048	<0.05816	<17.2	<0.1262	<0.5607	<2.74	0.88 B	<0.006
Tank No. 19	TK-19-O	Oily sludge	<0.00003	0.00008 B	<0.00032	<8.58	<0.0008	<0.0037	<0.0182	0.0064 B	<0.0006
Tank No. 21	TK-21-A	Oily water	<0.00003	0.00012 B	<0.00032	<17.2	<0.0008	<0.0037	<0.0182	<0.0046	<0.0006
Tank No. 22	TK-22-O	Oily sludge	<0.00003	0.00013 B	<0.00032	0.874	<0.0008	<0.0037	<0.0182	0.0067 B	<0.0006
Tank No. 23	TK-23-O (mg/kg)	Appears to be diesel	NA	0.011	NA	<6.25	NA	NA	NA	1.6B	<0.047
North Containment Area	Dike North	Water	<0.00000255	<0.00004	<0.00000214	<0.00217	<0.000362	<0.00106	<0.000349	0.0049 B	<0.0006
South Containment Area	Dike South	Water	<0.00000255	<0.00004	<0.00000214	<0.00109	<0.000362	<0.00106	<0.000349	<0.0046	<0.0006
Hazardous Criteria			0.4	0.2	10	200	2	100	5	1	5

**Table 1**  
**Gulfco Former AST Tank Farm**  
**Tank Sample - RCI/Toxicity Data**

Tank No.	Sample ID.	Physical Description	Tetrachloroethylene mg/L	Toxaphene mg/L	Trichloroethylene mg/L	2,4,5-Trichlorophenol mg/L	2,4,6-Trichlorophenol mg/L	2,4,5-TP (Silvex) mg/L	Vinyl Chloride mg/L
Tank No. 2	TK-2-O	Aqueous Phase	<0.768	NA	0.851 J	<0.508	<0.525	NA	<0.383
	TK-2-O	Organic Phase	<0.023	<0.00025	1.52	<0.001	<0.0021	<0.0016	0.247 J
	TK-2-S	Solids- sand, debris, etc.	55.7	<0.00025	205	<0.001	<0.0021	<0.0016	<0.01
Tank No. 4	TK-4-A	Oily Water	<0.000768	<0.00275	0.00102 J	<0.00406	<0.00042	<0.00013	<0.000383
Tank No. 6	TK-6-S	Rust Solids	<0.00908	<0.00025	0.027 J	<0.001	<0.0021	<0.0016	<0.00356
Tank No. 13	TK-13-O	Oily sludge	47.7	<0.00025	2.98 J	<0.001	<0.0021	<0.0016	0.988 J
Tank No. 14	None	Empty (2 in. of rust solids)	NA	NA	NA	NA	NA	NA	NA
Tank No. 15	TK-15-O	Oily sludge	<0.00908	<0.00025	<0.011	<0.001	<0.0021	<0.0016	<0.00356
Tank No. 16	TK-16-O	Oily sludge	<0.00908	<0.00025	<0.011	<0.001	<0.0021	<0.0016	<0.00356
Tank No. 17	TK-17-S	Rust solids	<0.00908	<0.00125	<0.011	<0.001	<0.0021	<0.0016	<0.00356
Tank No. 18	TK-18-O	Light Organic Phase	<9.08	<0.045	<10.8	<0.1552	<0.3149	<0.0016	<3.56
Tank No. 19	TK-19-O	Oily sludge	<4.54	<0.00025	<5.4	<0.001	<0.0021	<0.0016	<1.78
Tank No. 21	TK-21-A	Oily water	<9.08	<0.00025	<10.8	<0.001	<0.0021	<0.0016	<3.56
Tank No. 22	TK-22-O	Oily sludge	<0.00908	<0.00025	<0.011	<0.001	<0.0021	<0.0016	<0.00356
Tank No. 23	TK-23-O (mg/kg)	Appears to be diesel	<3.85	NA	<3.55	NA	NA	NA	<7.03
North Containment Area	Dike North	Water	0.00627 J	<0.000275	0.018	<0.000406	<0.00042	<0.00013	<0.000765
South Containment Area	Dike South	Water	<0.000768	<0.000275	<0.000702	<0.000406	<0.00042	<0.00013	<0.000383
Hazardous Criteria			0.7	0.5	0.5	400	2	1	0.2

**Table 1**  
**Gulfco Former AST Tank Farm**  
**Tank Sample - RCI/Toxicity Data**

Tank No.	Sample ID.	Physical Description	Comments
Tank No. 2	TK-2-O	Aqueous Phase	Total Data
	TK-2-O	Organic Phase	TCLP Data
	TK-2-S	Solids- sand, debris, etc.	TCLP Data
Tank No. 4	TK-4-A	Oily Water	Total Data
Tank No. 6	TK-6-S	Rust Solids	TCLP Data
Tank No. 13	TK-13-O	Oily sludge	TCLP Data
Tank No. 14	None	Empty (2 in. of rust solids)	
Tank No. 15	TK-15-O	Oily sludge	TCLP Data
Tank No. 16	TK-16-O	Oily sludge	TCLP Data
Tank No. 17	TK-17-S	Rust solids	TCLP Data
Tank No. 18	TK-18-O	Light Organic Phase	TCLP Data
Tank No. 19	TK-19-O	Oily sludge	TCLP Data
Tank No. 21	TK-21-A	Oily water	TCLP Data
Tank No. 22	TK-22-O	Oily sludge	TCLP Data
Tank No. 23	TK-23-O (mg/kg)	Appears to be diesel	Total Data (mg/kg)
North Containment Area	Dike North	Water	Total Data
South Containment Area	Dike South	Water	Total Data
Hazardous Criteria			

TABLE 1. COMPARISON CRITERIA FOR AST TANK FARM CONTAINMENT AREA SOIL EXCAVATION<sup>1</sup>

Chemicals of Interest	EPA Region 6 Soil Screening Criteria <sup>(2)</sup>	TotSoilComb <sup>(3)</sup>	Comparison Criteria <sup>(4)</sup>
<b>VOCs</b>			
1,1,1,2-Tetrachloroethane	7.6E+00	7.3E+01 <sup>(5)</sup>	7.6E+00
1,1,1-Trichloroethane	1.4E+03	5.4E+04 <sup>(5)</sup>	1.4E+03
1,1,2,2-Tetrachloroethane	9.7E-01	7.3E+00	9.7E-01
1,1,2-Trichloroethane	2.1E+00	1.9E+01	2.1E+00
1,1-Dichloroethane	2.3E+03	4.3E+03 <sup>(5)</sup>	2.3E+03
1,1-Dichloroethene	4.7E+02	3.5E+03 <sup>(5)</sup>	4.7E+02
1,1-Dichloropropene	---	6.1E+01	6.1E+01
1,2,3-Trichloropropane	3.4E-03	4.1E+00	3.4E-03
1,2,4-Trichlorobenzene	2.6E+02	4.2E+03 <sup>(5)</sup>	2.6E+02
1,2,4-Trimethylbenzene	1.9E+02	1.1E+02 <sup>(5)</sup>	1.9E+02
1,2-Dibromo-3-chloropropane	2.2E+00	1.4E-01 <sup>(5)</sup>	2.2E+00
1,2-Dibromoethane	7.0E-02	7.9E-01 <sup>(5)</sup>	7.0E-02
1,2-Dichlorobenzene	3.7E+02	5.7E+02	3.7E+02
1,2-Dichloroethane	8.4E-01	1.1E+01	8.4E-01
1,2-Dichloropropane	8.5E-01	4.4E+01	8.5E-01
1,3,5-Trimethylbenzene	7.8E+01	8.3E+01	7.8E+01
1,3-Dichlorobenzene	1.5E+02	8.8E+01	8.8E+01
1,3-Dichloropropane	---	6.1E+01	6.1E+01
1,4-Dichlorobenzene	8.1E+00	1.2E+03	8.1E+00
2,2-Dichloropropane	---	4.4E+01	4.4E+01
2-Butanone	3.4E+04	7.3E+04	3.4E+04
2-Chloroethylvinyl ether	---	3.3E+00	3.3E+00
2-Chlorotoluene	5.1E+02	2.5E+03	5.1E+02
2-Hexanone	---	7.9E+01	7.9E+01
4-Chlorotoluene	---	3.5E+00	3.5E+00
4-Isopropyltoluene	---	4.7E+03	4.7E+03
4-Methyl-2-pentanone	1.7E+04	2.8E+04	1.7E+04
Acetone	1.0E+05	8.1E+03	8.1E+03
Acrolein	3.8E-01	8.1E-01	3.8E-01
Acrylonitrile	5.5E-01	4.2E+00	5.5E-01
Benzene	1.6E+00	1.11E+02 <sup>(5)</sup>	1.6E+00
Bromobenzene	1.2E+02	1.2E+02 <sup>(5)</sup>	1.2E+02
Bromodichloromethane	2.6E+00	4.6E+02	2.6E+00
Bromoform	2.4E+02	6.0E+02	2.4E+02
Bromomethane	1.5E+01	5.3E+01	1.5E+01
Butanol	6.8E+04	3.1E+03	3.1E+03
Carbon disulfide	7.2E+02	7.2E+03	7.2E+02
Carbon tetrachloride	5.8E-01	1.9E+01	5.8E-01
Chlorobenzene	6.0E+02	5.4E+02 <sup>(5)</sup>	6.0E+02
Chloroethane	7.2E+00	8.7E+04	7.2E+00
Chloroform	5.8E-01	1.3E+01	5.8E-01
Chloromethane	3.0E+00	1.6E+02	3.0E+00
cis-1,2-Dichloroethene	1.6E+02	4.7E+03	1.6E+02
cis-1,3-Dichloropropene	---	4.3E+01	4.3E+01
Cyclohexane	6.8E+03	4.2E+04	6.8E+03
Dibromochloromethane	2.6E+00	3.4E+02	2.6E+00
Dibromomethane	5.9E+02	1.9E+02	1.9E+02
Dichlorodifluoromethane	3.4E+02	4.3E+04	3.4E+02
Ethylbenzene	2.3E+02	1.0E+04	2.3E+02
Hexachlorobutadiene	2.5E+01	2.3E+01	2.3E+01
Isopropylbenzene (Cumene)	5.8E+02	6.3E+03	5.8E+02

Chemicals of Interest	EPA Region 6 Soil Screening Criteria <sup>(2)</sup>	TotSoilComb <sup>(3)</sup>	Comparison Criteria <sup>(4)</sup>
Methyl acetate	1.0E+05	6.6E+03	6.6E+03
Methyl iodide	---	1.2E+02	1.2E+02
Methylcyclohexane	1.4E+02	3.3E+04	1.4E+02
Methylene chloride	2.2E+01	5.6E+02	2.2E+01
Naphthalene	2.1E+02	1.9E+02	1.9E+02
n-Butylbenzene	2.4E+02	4.0E+03	2.4E+02
n-Propylbenzene	2.4E+02	4.1E+03	2.4E+02
o-Xylene	2.8E+02	8.0E+03 <sup>(5)</sup>	2.8E+02
sec-Butylbenzene	2.2E+02	3.7E+03	2.2E+02
Styrene	1.7E+03	7.8E+03 <sup>(5)</sup>	1.7E+03
tert-Butyl methyl ether (MTBE)	4.1E+01	1.1E+03	4.1E+01
tert-Butylbenzene	3.9E+02	3.2E+03	3.9E+02
Tetrachloroethene	1.7E+00	3.3E+02 <sup>(5)</sup>	1.7E+00
Toluene	5.2E+02	2.9E+04 <sup>(5)</sup>	5.2E+02
trans-1,2-Dichloroethene	2.4E+02	6.42E+02 <sup>(5)</sup>	2.4E+02
trans-1,3-Dichloropropene	---	6.1E+01	6.1E+01
trans-1,4-Dichloro-2-butene	---	2.9E-01	2.9E-01
Trichloroethene	1.0E-01	1.1E+02 <sup>(5)</sup>	1.0E-01
Trichlorofluoromethane	1.4E+03	2.8E+04	1.4E+03
Trichlorotrifluoroethane	5.6E+03	3.3E+05	5.6E+03
Vinyl acetate	1.6E+03	2.2E+03	1.6E+03
Vinyl chloride	4.3E-01	1.3E+01 <sup>(5)</sup>	4.3E-01
Xylene (total)	2.1E+02	6.5E+03 <sup>(5)</sup>	2.1E+02
SVOCs			
1,2Diphenylhydrazine/Azobenzen	2.4E+00	1.5E+02 <sup>(5)</sup>	2.4E+00
2,4,5-Trichlorophenol	6.8E+04	1.2E+04	1.2E+04
2,4,6-Trichlorophenol	1.7E+02	6.81E+02 <sup>(5)</sup>	1.7E+02
2,4-Dichlorophenol	2.1E+03	1.7E+03	1.7E+03
2,4-Dimethylphenol	1.4E+04	2.9E+03	2.9E+03
2,4-Dinitrophenol	1.4E+03	1.4E+03	1.4E+03
2,4-Dinitrotoluene	1.4E+03	2.1E+01	2.1E+01
2,6-Dinitrotoluene	6.8E+02	2.8E+01	2.8E+01
2-Chloronaphthalene	2.6E+04	5.0E+04	2.6E+04
2-Chlorophenol	2.6E+02	2.4E+03	2.6E+02
2-Methylnaphthalene	---	2.5E+03	2.5E+03
2-Nitroaniline	2.0E+03	2.9E+01 <sup>(5)</sup>	2.0E+03
2-Nitrophenol	---	4.1E+02	4.1E+02
3,3'-Dichlorobenzidine	4.3E+00	4.2E+01	4.3E+00
3-Nitroaniline	---	1.6E+02	1.6E+02
4,6-Dinitro-2-methylphenol	---	2.26E+01 <sup>(5)</sup>	0.0E+00
4-Bromophenyl phenyl ether	---	1.1E+00	1.1E+00
4-Chloro-3-methylphenol	---	3.0E+03	3.0E+03
4-Chloroaniline	2.7E+03	9.5E+01 <sup>(5)</sup>	2.7E+03
4-Chlorophenyl phenyl ether	---	8.0E-01	8.0E-01
4-Nitroaniline	---	6.6E+02 <sup>(5)</sup>	0.0E+00
4-Nitrophenol	5.5E+03	1.1E+02	1.1E+02
Acenaphthene	3.3E+04	3.7E+04	3.3E+04
Acenaphthylene	---	3.7E+04	3.7E+04
Acetophenone	1.7E+03	3.3E+03	1.7E+03
Aniline	3.4E+02	9.3E+01	9.3E+01
Anthracene	1.0E+05	1.9E+05	1.0E+05
Atrazine (Aatrex)	8.6E+00	8.6E+01	8.6E+00
Benzaldehyde	6.8E+04	3.4E+02	3.4E+02

Chemicals of Interest	EPA Region 6 Soil Screening Criteria <sup>(2)</sup>	TotSoil <sub>Comb</sub> <sup>(3)</sup>	Comparison Criteria <sup>(4)</sup>
Benzidine	8.3E-03	3.3E-02	8.3E-03
Benzo(a)anthracene	2.3E+00	2.4E+01	2.3E+00
Benzo(a)pyrene	2.3E-01	2.4E+00	2.3E-01
Benzo(b)fluoranthene	2.3E+00	2.4E+01	2.3E+00
Benzo(g,h,i)perylene	---	1.9E+04	1.9E+04
Benzo(k)fluoranthene	2.3E+01	2.4E+02	2.3E+01
Benzoic acid	1.0E+05	5.0E+02	5.0E+02
Benzyl alcohol	1.0E+05	6.2E+03	6.2E+03
Biphenyl	2.6E+04	1.9E+02	1.9E+02
Bis(2-Chloroethoxy)methane	---	6.2E+00	6.2E+00
Bis(2-Chloroethyl)ether	6.2E-01	2.8E+00	6.2E-01
Bis(2-Chloroisopropyl)ether	---	1.1E+02	1.1E+02
Bis(2-Ethylhexyl)phthalate	1.4E+02	5.6E+02	1.4E+02
Butyl benzyl phthalate	2.4E+02	1.0E+04 <sup>(5)</sup>	2.4E+02
Caprolactam	1.0E+05	2.3E+02	2.3E+02
Carbazole	9.6E+01	9.5E+02	9.6E+01
Chrysene	2.3E+02	2.4E+03	2.3E+02
Dibenz(a,h)anthracene	2.3E-01	2.4E+00	2.3E-01
Dibenzofuran	1.7E+03	2.7E+03	1.7E+03
Diethyl phthalate	1.0E+05	2.0E+03	2.0E+03
Dimethyl phthalate	1.0E+05	9.3E+02	9.3E+02
Di-n-butyl phthalate	6.8E+04	1.6E+04	1.6E+04
Di-n-octyl phthalate	2.7E+04	1.3E+04 <sup>(5)</sup>	2.7E+04
Fluoranthene	2.4E+04	2.5E+04	2.4E+04
Fluorene	2.6E+04	2.5E+04	2.5E+04
Hexachlorobenzene	1.2E+00	6.9E+00	1.2E+00
Hexachlorocyclopentadiene	4.1E+03	1.0E+01	1.0E+01
Hexachloroethane	1.4E+02	5.2E+02	1.4E+02
Indeno(1,2,3-cd)pyrene	2.3E+00	2.4E+01	2.3E+00
Isophorone	2.0E+03	1.9E+03	1.9E+03
Nitrobenzene	1.1E+02	5.7E+01 <sup>(5)</sup>	1.1E+02
n-Nitrosodimethylamine	3.8E-02	1.3E-01	3.8E-02
n-Nitrosodi-n-propylamine	2.7E-01	1.4E+00	2.7E-01
n-Nitrosodiphenylamine	3.9E+02	1.9E+03	3.9E+02
o-Cresol	3.4E+04	1.9E+03	1.9E+03
Pentachlorophenol	1.0E+01	1.1E+02	1.0E+01
Phenanthrene	---	1.9E+04	1.9E+04
Phenol	1.0E+05	2.4E+03	2.4E+03
Pyrene	3.2E+04	1.9E+04	1.9E+04
Pyridine	6.8E+02	1.4E+02	1.4E+02

Notes:

1. All values in mg/kg.
2. From EPA's "Region 6 Human Health Medium-Specific Screening Levels 2004-2005". Industrial Outdoor Worker.
3. TotSoil<sub>Comb</sub> PCL = TCEQ Protective Concentration Level for 30 acre source area Commercial/Industrial total soil combined pathway (includes inhalation; ingestion; dermal pathways).
4. The lower value of the EPA Region 6 Soil Screening Criteria and the TotSoil<sub>Comb</sub> value.
5. Updated from Table 15 of RI/FS Workplan to reflect changes in toxicity data from 2005 to 2009 indicated in TCEQ PCL tables.



**GULFCO MARINE MAINTENANCE  
FREEPORT, BRAZORIA COUNTY, TEXAS**

Figure 1  
**FORMER AST TANK  
FARM AREA MAP**

PROJECT: 1352

BY: ZGK

REVISIONS

DATE: DEC., 2009

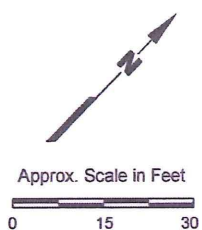
CHECKED: EFP

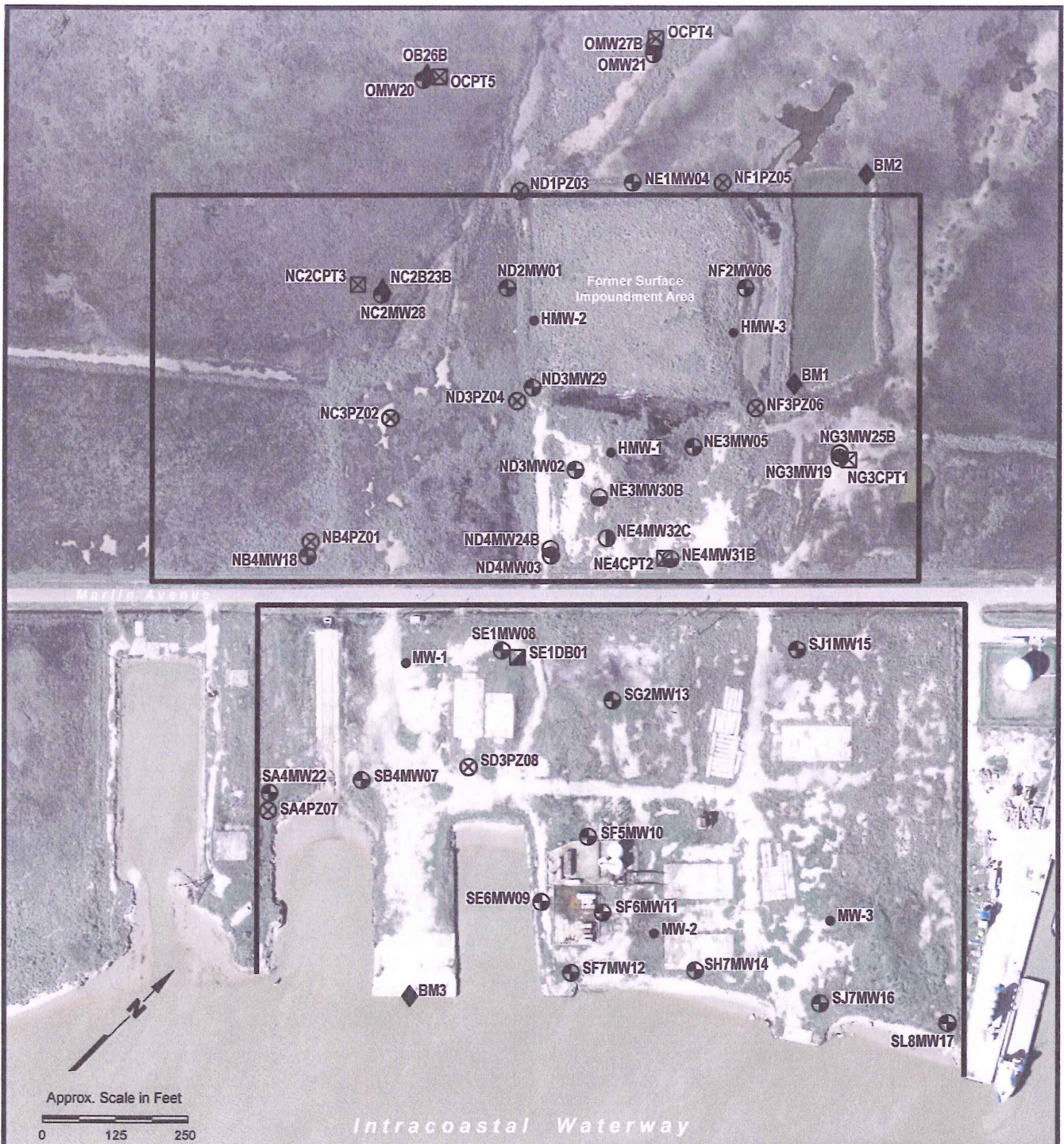
**PASTOR, BEHLING & WHEELER, LLC**  
CONSULTING ENGINEERS AND SCIENTISTS

**Note:**

Tank numbers, except 100, from LTE, 1999. Tank 100 (empty tank) removed by Hurricane Ike storm surge in September 2008.

Source of photo: H-GAC, Texas aerial photograph, 2006.





### EXPLANATION

- |   |                                     |
|---|-------------------------------------|
| — Gulfco Marine Maintenance Site Boundary (approximate) | ● Monitoring Well Location - Zone B |
| ⊕ Monitoring Well Location - Zone A                     | ▲ Soil Boring Location - Zone B     |
| ⊗ Temporary Piezometer - Zone A                         | ○ Monitoring Well Location - Zone C |
| ◆ Staff Gauge   | ⊠ CPT Piezometer Location - Zone C  |
| ● Previous Monitoring Well Location                     | ▣ Deep Soil Boring Location         |

Source of photo: H-GAC, Texas aerial photograph, 2006.

### GULFCO MARINE MAINTENANCE FREEPORT, BRAZORIA COUNTY, TEXAS

#### Figure 3 MONITORING WELL LOCATIONS

PROJECT: 1352

BY: ZGK

REVISIONS

DATE: MAY, 2009

CHECKED: EFP

**PASTOR, BEHLING & WHEELER, LLC**  
CONSULTING ENGINEERS AND SCIENTISTS

**TABLE 24 - DETECTED ZONE A GROUNDWATER CONCENTRATIONS  
EXCEEDING EXTENT EVALUATION COMPARISON VALUES**

Sample Location	Sample Date	Chemical of Interest	Concentration (mg/L)	Extent Evaluation Comparison Value <sup>(1)</sup> (mg/L)
NB4PZ01	8/3/2006	Chromium	0.14J	0.1
		Endosulfan II	0.000021J	0.000009
		Nickel	0.14J	0.013
		Silver	0.0088J	0.00019
NC3PZ02	8/2/2006	Chromium	0.16	0.1
		Silver	0.017J	0.00019
ND1PZ03	8/1-2/2006	Benzene	0.657	0.11
		Endosulfan II	0.0000103J	0.000009
		Silver	0.0099J	0.00019
		Vinyl chloride	1.22	0.2
ND2MW01	8/3/2006	1,1,1-Trichloroethane	15.4	1.6
		1,1-Dichloroethene	23.5	0.7
		1,2,3-Trichloropropane	25.5J-	0.029
		1,2-Dichloroethane	58.8	0.5
		1,2-Dichloropropane	3.45J	0.5
		4,4'-DDE	0.00027	0.00014
		Benzene	5.39J	0.11
		Chromium	0.15J	0.1
		cis-1,2-Dichloroethene	13.4	7
		Dieldrin	0.0000264J	0.000002
		gamma-BHC (Lindane)	0.00016J	0.000016
		Methylene chloride	300	0.5
		Silver	0.012J	0.00019
		Tetrachloroethene	20.5	0.5
		Trichloroethene	84	0.5
	11/8/2007	1,1-Dichloroethene	2.92	0.7
		1,2-Dichloroethene(Total)	19.2	0.68
		Benzene	0.518J	0.11
		cis-1,2-Dichloroethene	19.2	7
	6/18/2008	Vinyl chloride	0.331J	0.2
		1,1-Dichloroethene	2.35	0.7
		1,2,3-Trichloropropane	0.374J	0.029
		1,2-Dichloroethane	1.25	0.5
		1,2-Dichloroethene(Total)	12.5	0.68
		Benzene	0.375J	0.11
		cis-1,2-Dichloroethene	12.5	7
		Methylene chloride	2.88	0.5
		Vinyl chloride	0.978J	0.2

**TABLE 24 - DETECTED ZONE A GROUNDWATER CONCENTRATIONS  
EXCEEDING EXTENT EVALUATION COMPARISON VALUES**

Sample Location	Sample Date	Chemical of Interest	Concentration (mg/L)	Extent Evaluation Comparison Value <sup>(1)</sup> (mg/L)
ND3MW02	8/3/2006	1,1,1-Trichloroethane	2.25	1.6
		1,2,3-Trichloropropane	0.497J	0.029
		Anthracene	0.000832J	0.00018
		Chromium	0.15J	0.1
		gamma-BHC (Lindane)	0.00019J	0.000016
		Silver	0.0063J	0.00019
		Tetrachloroethene	1.92	0.5
		Trichloroethene	6.04	0.5
	11/8/2007	1,1,1-Trichloroethane	14	1.6
		1,2,3-Trichloropropane	1.57	0.029
		1,2-Dichloroethene(Total)	9.37	0.68
		Benzene	0.158J	0.11
		cis-1,2-Dichloroethene	9.37	7
		Tetrachloroethene	2.1	0.5
		Trichloroethene	17.7	0.5
	6/18/2008	1,1,1-Trichloroethane	42	1.6
		1,1-Dichloroethene	0.975J	0.7
		1,2,3-Trichloropropane	3.86J	0.029
		1,2-Dichloroethene(Total)	13.6	0.68
		cis-1,2-Dichloroethene	13.6	7
		Tetrachloroethene	34.8	0.5
		Toluene	0.691J	0.48
		Trichloroethene	76	0.5
ND3MW29	6/5/2007	1,1,1-Trichloroethane	156	1.6
		1,2,3-Trichloropropane	44.3J	0.029
		1,2-Dichloroethane	328	0.5
		Endosulfan II	0.00012J	0.000009
		gamma-BHC (Lindane)	0.00153	0.000016
		Methylene chloride	1230	0.5
		Trichloroethene	61.2J	0.5
	11/8/2007	1,1,1-Trichloroethane	195	1.6
		1,1-Dichloroethene	22J	0.7
		1,2,3-Trichloropropane	53.1J	0.029
		1,2-Dichloroethane	292	0.5
		Methylene chloride	1100	0.5
		Trichloroethene	69.4J	0.5
	6/18/2008	1,1,1-Trichloroethane	234	1.6
		1,1-Dichloroethene	21.3J	0.7
		1,2,3-Trichloropropane	44.4J	0.029
		1,2-Dichloroethane	347	0.5
		1,2-Dichloroethene(Total)	24.5J	0.68
		Benzene	5.92J	0.11
		cis-1,2-Dichloroethene	24.5J	7
		Methylene chloride	1100	0.5
		Tetrachloroethene	12.9J	0.5
		Trichloroethene	135	0.5

**TABLE 24 - DETECTED ZONE A GROUNDWATER CONCENTRATIONS  
EXCEEDING EXTENT EVALUATION COMPARISON VALUES**

Sample Location	Sample Date	Chemical of Interest	Concentration (mg/L)	Extent Evaluation Comparison Value <sup>(1)</sup> (mg/L)
ND3PZ04	7/31/2006	1,1,1-Trichloroethane	62.7	1.6
		1,1-Dichloroethene	29.2	0.7
		1,2,3-Trichloropropane	28.2	0.029
		1,2-Dichloropropane	3.36J	0.5
		Benzene	8.24J	0.11
		Carbon tetrachloride	7.58J	0.5
		cis-1,2-Dichloroethene	124	7
		Heptachlor epoxide	0.000025	0.0000036
		Silver	0.005J	0.00019
		Tetrachloroethene	7.86J	0.5
		Toluene	4.05J	0.48
		Trichloroethene	31.7	0.5
		Vinyl chloride	5.09J	0.2
ND4MW03	8/2/2006	Silver	0.013	0.00019
NE1MW04	8/3/2006	Chromium	0.11J	0.1
		Endosulfan II	0.0000138J	0.000009
		Silver	0.014J	0.00019
NE3MW05	8/2/2006	Anthracene	0.00138J	0.00018
		Ethylbenzene	0.74	0.25
		Naphthalene	0.322	0.13
		Phenanthrene	0.00638	0.0046
		Pyrene	0.000517J	0.00024
		Silver	0.001J	0.00019
	11/7/2007	Ethylbenzene	0.273	0.25
		Naphthalene	0.243	0.13
NF1PZ05	8/3/2006	Chromium	0.13J	0.11
		Endosulfan II	0.0000148J	0.000009
		Silver	0.0085J	0.00019
NF2MW06	8/3/2006	1,2,3-Trichloropropane	0.214	0.029
		Endosulfan sulfate	0.0000156J	0.000009
		Methylene chloride	0.944	0.5
		Silver	0.0032J	0.00019
		Trichloroethene	0.506	0.5
NF3PZ06	8/1/2006	Nickel	0.084	0.013
		Silver	0.011J	0.00019
SA4PZ07	8/3/2006	Chromium	0.14J	0.1
		Endosulfan II	0.0000309J	0.000009
		Nickel	0.022J	0.013
		Silver	0.016J	0.00019
SB4MW07	8/1/2006	Silver	0.03J	0.00019

**TABLE 24 - DETECTED ZONE A GROUNDWATER CONCENTRATIONS  
EXCEEDING EXTENT EVALUATION COMPARISON VALUES**

Sample Location	Sample Date	Chemical of Interest	Concentration (mg/L)	Extent Evaluation Comparison Value <sup>(1)</sup> (mg/L)
SD3PZ08	7/31/2006	Chromium	0.15	0.1
		Silver	0.012J	0.00019
SE1MW08	8/2/2006	Silver	0.011	0.00019
SE6MW09	7/31/2006	Silver	0.0024J	0.00019
SF5MW10	8/1/2006	gamma-BHC (Lindane)	0.000024J	0.000016
	6/4/2007	gamma-BHC (Lindane)	0.000042J	0.000016
SF6MW11	7/31/2006	Silver	0.0099J	0.00019
SF7MW12	7/31/2006	Silver	0.0044J	0.00019
SG2MW13	8/1/2006	Silver	0.015J	0.00019
SH7MW14	7/31/2006	Silver	0.0028J	0.00019
SJ1MW15	8/2/2006	Endosulfan sulfate	0.000104	0.000009
		Heptachlor epoxide	0.0000201J	0.0000036
		Silver	0.0088	0.00019
SJ7MW16	7/31/2006	Silver	0.0048J	0.00019
SL8MW17	8/3/2006	Silver	0.028J	0.00019

Notes:

(1) Extent Evaluation Comparison Values from Table 23.

(2) Data qualifiers: J = estimated value. J- = estimated value, biased low.

## **APPENDIX H**

### **LABORATORY ANALYTICAL AND VALIDATION REPORTS**

# **ANALYTICAL RESULTS**

**PERFORMED BY**

**GULF COAST ANALYTICAL LABORATORIES, INC.**

**7979 GSRI Avenue  
Baton Rouge, LA 70820**

**Report Date** 01/03/2011

**GCAL Report** 210123108



***Deliver To*** Pastor, Behling, Wheeler  
2201 Double Creek Drive  
Round Rock, TX 78664  
512-671-3434

***Attn*** Eric Pastor

***Project*** Gulfco Marine Maintenance Site

## CASE NARRATIVE

**Client:** Pastor, Behling, & Wheeler      **Report:** 210123108

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

### **VOLATILES MASS SPECTROMETRY**

In the SW-846 8260B analysis, samples 21012310802 (N. CONTAINMENT(NW)) and 21012310803 (N. CONTAINMENT(NE)) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument. The dilutions are reflected in elevated detection limits.

# Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

## Common Abbreviations Utilized in this Report

<b>ND</b>	Indicates the result was Not Detected at the specified RDL
<b>DO</b>	Indicates the result was Diluted Out
<b>MI</b>	Indicates the result was subject to Matrix Interference
<b>TNTC</b>	Indicates the result was Too Numerous To Count
<b>SUBC</b>	Indicates the analysis was Sub-Contracted
<b>FLD</b>	Indicates the analysis was performed in the Field
<b>PQL</b>	Practical Quantitation Limit
<b>MDL</b>	Method Detection Limit
<b>RDL</b>	Reporting Detection Limit
<b>00:00</b>	Reported as a time equivalent to 12:00 AM

## Reporting Flags Utilized in this Report

<b>J</b>	Indicates an estimated value
<b>U</b>	Indicates the compound was analyzed for but not detected
<b>B</b>	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
<b>B</b>	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with [NELAC](#), this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

---

Robyn Miguez  
Technical Director  
**GCAL REPORT 210123108**

THIS REPORT CONTAINS \_\_\_\_\_ PAGES.

## Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21012310801	S. CONTAINMENT	Water	12/30/2010 13:25	12/31/2010 08:50
21012310802	N. CONTAINMENT(NW)	Water	12/30/2010 13:45	12/31/2010 08:50
21012310803	N. CONTAINMENT(NE)	Water	12/30/2010 14:05	12/31/2010 08:50
21012310804	TRIP BLANK	Water	12/30/2010 14:10	12/31/2010 08:50

# Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21012310801	S. CONTAINMENT	Water	12/30/2010 13:25	12/31/2010 08:50

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	5.66	5	0.054	ug/L
67-66-3	Chloroform	1.54J	5	0.057	ug/L
127-18-4	Tetrachloroethene	10.7	5	0.121	ug/L
79-01-6	Trichloroethene	11.1	5	0.062	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21012310802	N. CONTAINMENT(NW)	Water	12/30/2010 13:45	12/31/2010 08:50

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	7290	250	4.30	ug/L
71-43-2	Benzene	2000	250	2.71	ug/L
67-66-3	Chloroform	5290	250	2.83	ug/L
127-18-4	Tetrachloroethene	252	250	6.05	ug/L
79-01-6	Trichloroethene	1930	250	3.09	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21012310803	N. CONTAINMENT(NE)	Water	12/30/2010 14:05	12/31/2010 08:50

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	580	500	8.60	ug/L
71-43-2	Benzene	137J	500	5.42	ug/L
67-66-3	Chloroform	8660	500	5.65	ug/L
127-18-4	Tetrachloroethene	225J	500	12.1	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21012310801	S. CONTAINMENT	Water	12/30/2010 13:25	12/31/2010 08:50

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/31/2010 19:18	RJU	448261

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	5U	5	0.086	ug/L
<b>71-43-2</b>	<b>Benzene</b>	<b>5.66</b>	<b>5</b>	<b>0.054</b>	<b>ug/L</b>
<b>67-66-3</b>	<b>Chloroform</b>	<b>1.54J</b>	<b>5</b>	<b>0.057</b>	<b>ug/L</b>
<b>127-18-4</b>	<b>Tetrachloroethene</b>	<b>10.7</b>	<b>5</b>	<b>0.121</b>	<b>ug/L</b>
<b>79-01-6</b>	<b>Trichloroethene</b>	<b>11.1</b>	<b>5</b>	<b>0.062</b>	<b>ug/L</b>
75-01-4	Vinyl chloride	5U	5	0.093	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	50.8	ug/L	102	78 - 130
1868-53-7	Dibromofluoromethane	50	51.2	ug/L	102	77 - 127
2037-26-5	Toluene d8	50	51.2	ug/L	102	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	51.9	ug/L	104	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21012310802	N. CONTAINMENT(NW)	Water	12/30/2010 13:45	12/31/2010 08:50

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	12/31/2010 19:39	RJU	448261

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	7290	250	4.30	ug/L
71-43-2	Benzene	2000	250	2.71	ug/L
67-66-3	Chloroform	5290	250	2.83	ug/L
127-18-4	Tetrachloroethene	252	250	6.05	ug/L
79-01-6	Trichloroethene	1930	250	3.09	ug/L
75-01-4	Vinyl chloride	250U	250	4.65	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2500	2590	ug/L	104	78 - 130
1868-53-7	Dibromofluoromethane	2500	2450	ug/L	98	77 - 127
2037-26-5	Toluene d8	2500	2630	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	2500	2520	ug/L	101	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21012310803	N. CONTAINMENT(NE)	Water	12/30/2010 14:05	12/31/2010 08:50

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			100	12/31/2010 20:00	RJU	448261

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	580	500	8.60	ug/L
71-43-2	Benzene	137J	500	5.42	ug/L
67-66-3	Chloroform	8660	500	5.65	ug/L
127-18-4	Tetrachloroethene	225J	500	12.1	ug/L
79-01-6	Trichloroethene	500U	500	6.18	ug/L
75-01-4	Vinyl chloride	500U	500	9.30	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	5000	5120	ug/L	102	78 - 130
1868-53-7	Dibromofluoromethane	5000	5250	ug/L	105	77 - 127
2037-26-5	Toluene d8	5000	5180	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	5000	5150	ug/L	103	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21012310804	TRIP BLANK	Water	12/30/2010 14:10	12/31/2010 08:50

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	12/31/2010 18:58	RJU	448261

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	5U	5	0.086	ug/L
71-43-2	Benzene	5U	5	0.054	ug/L
67-66-3	Chloroform	5U	5	0.057	ug/L
127-18-4	Tetrachloroethene	5U	5	0.121	ug/L
79-01-6	Trichloroethene	5U	5	0.062	ug/L
75-01-4	Vinyl chloride	5U	5	0.093	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.9	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	49.1	ug/L	98	77 - 127
2037-26-5	Toluene d8	50	52.7	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.3	ug/L	101	71 - 127

# GC/MS Volatiles Quality Control Summary

Analytical Batch 448261 Prep Batch N/A		Client ID MB448261 GCAL ID 909344 Sample Type Method Blank Analytical Date 12/31/2010 17:55 Matrix Water			LCS448261 909345 LCS 12/31/2010 16:44 Water			LCSD448261 909346 LCSD 12/31/2010 17:05 Water			
<b>SW-846 8260B</b>		Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
67-66-3	Chloroform	5U	5	50.0	46.2	92	75 - 122	45.7	91	1	30
107-06-2	1,2-Dichloroethane	5U	5	50.0	45.1	90	71 - 129	44.8	90	0.7	30
127-18-4	Tetrachloroethene	5U	5	50.0	49.6	99	68 - 128	49.4	99	0.4	30
75-01-4	Vinyl chloride	5U	5	50.0	49.1	98	68 - 132	48.9	98	0.4	30
75-35-4	1,1-Dichloroethene	5U	5	50.0	49.0	98	69 - 129	48.3	97	1	20
71-43-2	Benzene	5U	5	50.0	48.5	97	70 - 129	48.2	96	0.6	20
79-01-6	Trichloroethene	5U	5	50.0	47.3	95	76 - 129	47.7	95	0.8	20
108-88-3	Toluene	5U	5	50.0	47.5	95	72 - 120	48.2	96	1	20
108-90-7	Chlorobenzene	5U	5	50.0	47.9	96	74 - 123	47.7	95	0.4	20
<b>Surrogate</b>											
460-00-4	4-Bromofluorobenzene	47.8	96	50	49.7	99	78 - 130	49.4	99		
1868-53-7	Dibromofluoromethane	48.7	97	50	49.3	99	77 - 127	49.3	99		
2037-26-5	Toluene d8	52.5	105	50	49.6	99	76 - 134	50.1	100		
17060-07-0	1,2-Dichloroethane-d4	49.1	98	50	48.9	98	71 - 127	48.9	98		

## CHAIN OF CUSTODY RECORD

**GULF COAST ANALYTICAL LABORATORIES, INC**  
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402  
Phone 225.769.4900 • Fax 225.767.5717

Lab use only

PASTOR, BEHLING, & WHEELER

**Client Name**

4482

Client #

210123168

Workorder #

1/04/11

**Due Date**

[illegible]

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

GCAL-06 11/98

Matrix<sup>a</sup>: W = water, S = soil, SD = solid, L = liquid, SL = sludge, o = oil, CT = charcoal tube, A = air bag

**We cannot accept verbal changes. Please fax written changes to (225) 767-5717**

## **ANALYTICAL RESULTS**

PERFORMED BY

**GULF COAST ANALYTICAL LABORATORIES, INC.**

**7979 GSRI Avenue  
Baton Rouge, LA 70820**

**Report Date 01/18/2011**

**GCAL Report 211011405**



***Deliver To*** Pastor, Behling, Wheeler  
2201 Double Creek Drive  
Round Rock, TX 78664  
512-671-3434

***Attn*** Eric Pastor

***Project*** GULFCO AST Removal

## CASE NARRATIVE

**Client:** Pastor, Behling, Wheeler      **Report:** 211011405

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

### **VOLATILES MASS SPECTROMETRY**

In the SW-846 8260B analysis, samples 21101140501 (T-15-F), 21101140502 (T-15-F MS), 21101140503 (T-15-F MSD), 21101140504 (T-21-F), 21101140505 (NC-0-0.3), 21101140506 (T-2-WEST), 21101140507 (T-6-FLOOR), 21101140508 (T-6-EAST), 21101140509 (T-6-SOUTH), 21101140510 (T-6-NORTH), 21101140511 (BLIND DUP), 21101140512 (SC-W), and 21101140513 (SC-E) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument. The dilutions are reflected in elevated detection limits.

In the SW-846 8260B analysis for analytical batch 449013, the MS/MSD exhibited recovery and RPD failures. All LCS/LCSD recoveries and RPDs are acceptable.

### **SEMI-VOLATILES MASS SPECTROMETRY**

In the SW-846 8270C analysis, sample 21101140504 (T-21-F) had to be diluted to bracket the concentration of a target compound within the calibration range of the instrument. The recoveries for the surrogates are reported as D, diluted out for the diluted run performed on this sample.

In the SW-846 8270C analysis of prep batch 448916, the MS/MSD and LCS/LCSD recoveries are below the lower control limit for Benzaldehyde.. The LCS/LCSD RPD is above the control limit for Aniline. These are poor performing compounds so no corrective action was taken.

In the SW-846 8270C analysis for prep batch 448924, the LCS/LCSD exhibited recoveries above the established control limits for Aniline and Benzaldehyde. These are poor performing compounds that were not detected in the associated samples.

# Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

## Common Abbreviations Utilized in this Report

<b>ND</b>	Indicates the result was Not Detected at the specified RDL
<b>DO</b>	Indicates the result was Diluted Out
<b>MI</b>	Indicates the result was subject to Matrix Interference
<b>TNTC</b>	Indicates the result was Too Numerous To Count
<b>SUBC</b>	Indicates the analysis was Sub-Contracted
<b>FLD</b>	Indicates the analysis was performed in the Field
<b>PQL</b>	Practical Quantitation Limit
<b>MDL</b>	Method Detection Limit
<b>RDL</b>	Reporting Detection Limit
<b>00:00</b>	Reported as a time equivalent to 12:00 AM

## Reporting Flags Utilized in this Report

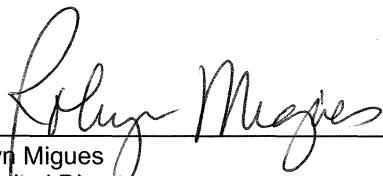
<b>J</b>	Indicates an estimated value
<b>U</b>	Indicates the compound was analyzed for but not detected
<b>B</b>	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
<b>B</b>	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

  
\_\_\_\_\_  
Robyn Miguez  
Technical Director  
GCAL REPORT 211011405

THIS REPORT CONTAINS 277 PAGES.

## Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21101140501	T-15-F	Solid	01/13/2011 14:00	01/14/2011 09:15
21101140502	T-15-F MS	Solid	01/13/2011 14:00	01/14/2011 09:15
21101140503	T-15-F MSD	Solid	01/13/2011 14:00	01/14/2011 09:15
21101140504	T-21-F	Solid	01/13/2011 14:45	01/14/2011 09:15
21101140505	NC-0-0.3	Solid	01/13/2011 14:55	01/14/2011 09:15
21101140506	T-2-WEST	Solid	01/13/2011 15:05	01/14/2011 09:15
21101140507	T-6-FLOOR	Solid	01/13/2011 15:35	01/14/2011 09:15
21101140508	T-6-EAST	Solid	01/13/2011 15:55	01/14/2011 09:15
21101140509	T-6-SOUTH	Solid	01/13/2011 16:15	01/14/2011 09:15
21101140510	T-6-NORTH	Solid	01/13/2011 16:25	01/14/2011 09:15
21101140511	BLIND DUP	Solid	01/13/2011 00:00	01/14/2011 09:15
21101140512	SC-W	Solid	01/13/2011 16:45	01/14/2011 09:15
21101140513	SC-E	Solid	01/13/2011 16:55	01/14/2011 09:15
21101140514	EQUIPMENT BLANK	Water	01/13/2011 17:10	01/14/2011 09:15
21101140515	TRIP BLANK 1	Water	01/13/2011 17:15	01/14/2011 09:15
21101140516	TRIP BLANK 2	Water	01/13/2011 17:20	01/14/2011 09:15

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-15-F

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 6.18 (g/ml) g Lab Sample ID: 21101140501

Level: (low/med) LOW Lab File ID: 2110116/a8965

% Moisture: not dec. 16.2 Date Collected: 01/13/11 Time: 1400

GC Column: RTX-VMS-30 ID: .25 (mm) Date Received: 01/14/11

Instrument ID: MSV11 Date Analyzed: 01/16/11 Time: 1118

Soil Extract Volume: \_\_\_\_\_ (µL) Dilution Factor: 50 Analyst: RJU

Soil Aliquot Volume: \_\_\_\_\_ (µL) Prep Batch: \_\_\_\_\_ Analytical Batch: 449013

Analytical Method: SW-846 8260

CONCENTRATION UNITS: mg/kg

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.241	U	0.00507	0.241
71-55-6	1,1,1-Trichloroethane	0.241	U	0.011	0.241
79-34-5	1,1,2,2-Tetrachloroethane	0.241	U	0.013	0.241
79-00-5	1,1,2-Trichloroethane	0.241	U	0.011	0.241
75-34-3	1,1-Dichloroethane	0.241	U	0.016	0.241
75-35-4	1,1-Dichloroethene	0.241	U	0.032	0.241
563-58-6	1,1-Dichloropropene	0.241	U	0.010	0.241
96-18-4	1,2,3-Trichloropropane	0.097	U	0.017	0.097
120-82-1	1,2,4-Trichlorobenzene	0.241	U	0.015	0.241
95-63-6	1,2,4-Trimethylbenzene	0.241	U	0.014	0.241
96-12-8	1,2-Dibromo-3-chloropropane	0.241	U	0.039	0.241
106-93-4	1,2-Dibromoethane	0.241	U	0.012	0.241
95-50-1	1,2-Dichlorobenzene	0.241	U	0.016	0.241
107-06-2	1,2-Dichloroethane	0.241	U	0.00633	0.241
78-87-5	1,2-Dichloropropane	0.241	U	0.00522	0.241
108-67-8	1,3,5-Trimethylbenzene	0.241	U	0.012	0.241
541-73-1	1,3-Dichlorobenzene	0.241	U	0.015	0.241
142-28-9	1,3-Dichloropropane	0.241	U	0.00865	0.241
106-46-7	1,4-Dichlorobenzene	0.241	U	0.020	0.241
594-20-7	2,2-Dichloropropane	0.241	U	0.056	0.241
78-93-3	2-Butanone	0.241	U	0.029	0.241
110-75-8	2-Chloroethylvinyl ether	0.241	U	0.011	0.241
95-49-8	2-Chlorotoluene	0.241	U	0.013	0.241
591-78-6	2-Hexanone	0.241	U	0.016	0.241
106-43-4	4-Chlorotoluene	0.241	U	0.015	0.241
99-87-6	4-Isopropyltoluene	0.241	U	0.013	0.241
108-10-1	4-Methyl-2-pentanone	0.241	U	0.016	0.241
67-64-1	Acetone	1.21	U	0.051	1.21
107-02-8	Acrolein	1.21	U	0.097	1.21
107-13-1	Acrylonitrile	1.21	U	0.052	1.21
71-43-2	Benzene	0.241	U	0.00662	0.241

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-15-F

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 6.18 (g/ml) g

Lab Sample ID: 21101140501

Level: (low/med) LOW

Lab File ID: 2110116/a8965

% Moisture: not dec. 16.2

Date Collected: 01/13/11

Time: 1400

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1118

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-86-1	Bromobenzene	0.241	U	0.015	0.241
75-27-4	Bromodichloromethane	0.241	U	0.00724	0.241
75-25-2	Bromoform	0.241	U	0.011	0.241
74-83-9	Bromomethane	0.241	U	0.071	0.241
75-15-0	Carbon disulfide	0.241	U	0.022	0.241
56-23-5	Carbon tetrachloride	0.241	U	0.011	0.241
108-90-7	Chlorobenzene	0.241	U	0.00908	0.241
75-00-3	Chloroethane	0.241	U	0.032	0.241
67-66-3	Chloroform	0.638		0.012	0.241
74-87-3	Chloromethane	0.241	U	0.037	0.241
110-82-7	Cyclohexane	0.241	U	0.00850	0.241
124-48-1	Dibromochloromethane	0.241	U	0.00676	0.241
74-95-3	Dibromomethane	0.241	U	0.015	0.241
75-71-8	Dichlorodifluoromethane	0.241	U	0.00536	0.241
100-41-4	Ethylbenzene	0.241	U	0.00995	0.241
87-68-3	Hexachlorobutadiene	0.241	U	0.011	0.241
98-82-8	Isopropylbenzene (Cumene)	0.241	U	0.00942	0.241
79-20-9	Methyl Acetate	0.241	U	0.017	0.241
74-88-4	Methyl iodide	0.241	U	0.063	0.241
108-87-2	Methylcyclohexane	0.241	U	0.00792	0.241
75-09-2	Methylene chloride	0.483	U	0.017	0.483
91-20-3	Naphthalene	0.241	U	0.040	0.241
100-42-5	Styrene	0.241	U	0.013	0.241
127-18-4	Tetrachloroethene	0.241	U	0.010	0.241
108-88-3	Toluene	0.241	U	0.00966	0.241
79-01-6	Trichloroethene	0.112	J	0.011	0.241
75-69-4	Trichlorofluoromethane	0.241	U	0.00647	0.241
76-13-1	Trichlorotrifluoroethane	0.241	U	0.056	0.241
108-05-4	Vinyl acetate	0.241	U	0.011	0.241
75-01-4	Vinyl chloride	0.241	U	0.00652	0.241
1330-20-7	Xylene (total)	0.483	U	0.033	0.483
156-59-2	cis-1,2-Dichloroethene	0.198	J	0.00831	0.241

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-15-F

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 6.18 (g/ml) g

Lab Sample ID: 21101140501

Level: (low/med) LOW

Lab File ID: 2110116/a8965

% Moisture: not dec. 16.2

Date Collected: 01/13/11

Time: 1400

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1118

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-01-5	cis-1,3-Dichloropropene	0.241	U	0.00700	0.241
136777-61-	m,p-Xylene	0.241	U	0.024	0.241
71-36-3	n-Butyl alcohol	1.21	U	0.884	1.21
104-51-8	n-Butylbenzene	0.241	U	0.017	0.241
103-65-1	n-Propylbenzene	0.241	U	0.013	0.241
95-47-6	o-Xylene	0.241	U	0.00913	0.241
135-98-8	sec-Butylbenzene	0.241	U	0.012	0.241
1634-04-4	tert-Butyl methyl ether (MTBE)	0.241	U	0.00807	0.241
98-06-6	tert-Butylbenzene	0.241	U	0.011	0.241
156-60-5	trans-1,2-Dichloroethene	0.241	U	0.00976	0.241
10061-02-6	trans-1,3-Dichloropropene	0.241	U	0.011	0.241
110-57-6	trans-1,4-Dichloro-2-butene	0.241	U	0.027	0.241

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-15-F MS

Lab Name: GCAL

Contract: \_\_\_\_\_

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 4.91 (g/ml) g

Lab Sample ID: 21101140502

Level: (low/med) LOW

Lab File ID: 2110116/a8972

% Moisture: not dec. 16.2

Date Collected: 01/13/11

Time: 1400

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1401

Soil Extract Volume: \_\_\_\_\_ (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: \_\_\_\_\_ (µL)

Prep Batch: \_\_\_\_\_

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	2.97		0.00638	0.304
71-55-6	1,1,1-Trichloroethane	2.93		0.014	0.304
79-34-5	1,1,2,2-Tetrachloroethane	2.77		0.017	0.304
79-00-5	1,1,2-Trichloroethane	2.71		0.014	0.304
75-34-3	1,1-Dichloroethane	2.97		0.020	0.304
75-35-4	1,1-Dichloroethene	2.94		0.041	0.304
563-58-6	1,1-Dichloropropene	2.95		0.013	0.304
96-18-4	1,2,3-Trichloropropane	2.58		0.021	0.122
120-82-1	1,2,4-Trichlorobenzene	2.71		0.019	0.304
95-63-6	1,2,4-Trimethylbenzene	3.01		0.018	0.304
96-12-8	1,2-Dibromo-3-chloropropane	2.53		0.049	0.304
106-93-4	1,2-Dibromoethane	2.75		0.015	0.304
95-50-1	1,2-Dichlorobenzene	2.96		0.020	0.304
107-06-2	1,2-Dichloroethane	2.85		0.00796	0.304
78-87-5	1,2-Dichloropropane	3.00		0.00657	0.304
108-67-8	1,3,5-Trimethylbenzene	3.01		0.015	0.304
541-73-1	1,3-Dichlorobenzene	2.98		0.019	0.304
142-28-9	1,3-Dichloropropane	2.79		0.011	0.304
106-46-7	1,4-Dichlorobenzene	3.00		0.025	0.304
594-20-7	2,2-Dichloropropane	2.91		0.071	0.304
78-93-3	2-Butanone	2.73		0.037	0.304
110-75-8	2-Chloroethylvinyl ether	2.18		0.014	0.304
95-49-8	2-Chlorotoluene	3.01		0.016	0.304
591-78-6	2-Hexanone	2.71		0.021	0.304
106-43-4	4-Chlorotoluene	3.03		0.019	0.304
99-87-6	4-Isopropyltoluene	2.95		0.016	0.304
108-10-1	4-Methyl-2-pentanone	2.57		0.021	0.304
67-64-1	Acetone	2.84		0.064	1.52
107-02-8	Acrolein	1.05	J	0.122	1.52
107-13-1	Acrylonitrile	13.0		0.065	1.52
71-43-2	Benzene	3.10		0.00833	0.304

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-15-F MS

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 4.91 (g/ml) g

Lab Sample ID: 21101140502

Level: (low/med) LOW

Lab File ID: 2110116/a8972

% Moisture: not dec. 16.2

Date Collected: 01/13/11

Time: 1400

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1401

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-86-1	Bromobenzene	3.02		0.018	0.304
75-27-4	Bromodichloromethane	2.97		0.00912	0.304
75-25-2	Bromoform	2.77		0.014	0.304
74-83-9	Bromomethane	2.78		0.089	0.304
75-15-0	Carbon disulfide	2.94		0.028	0.304
56-23-5	Carbon tetrachloride	2.90		0.014	0.304
108-90-7	Chlorobenzene	3.01		0.011	0.304
75-00-3	Chloroethane	2.64		0.040	0.304
67-66-3	Chloroform	2.96		0.015	0.304
74-87-3	Chloromethane	2.63		0.046	0.304
110-82-7	Cyclohexane	3.00		0.011	0.304
124-48-1	Dibromochloromethane	2.84		0.00851	0.304
74-95-3	Dibromomethane	2.81		0.019	0.304
75-71-8	Dichlorodifluoromethane	2.75		0.00675	0.304
100-41-4	Ethylbenzene	2.94		0.013	0.304
87-68-3	Hexachlorobutadiene	2.76		0.014	0.304
98-82-8	Isopropylbenzene (Cumene)	2.91		0.012	0.304
79-20-9	Methyl Acetate	2.76		0.021	0.304
74-88-4	Methyl iodide	3.14		0.080	0.304
108-87-2	Methylcyclohexane	2.88		0.00997	0.304
75-09-2	Methylene chloride	2.85		0.021	0.608
91-20-3	Naphthalene	2.42		0.050	0.304
100-42-5	Styrene	3.08		0.016	0.304
127-18-4	Tetrachloroethene	2.89		0.013	0.304
108-88-3	Toluene	3.02		0.012	0.304
79-01-6	Trichloroethene	2.96		0.014	0.304
75-69-4	Trichlorofluoromethane	2.96		0.00815	0.304
76-13-1	Trichlorotrifluoroethane	2.90		0.070	0.304
108-05-4	Vinyl acetate	2.13		0.013	0.304
75-01-4	Vinyl chloride	2.76		0.00821	0.304
1330-20-7	Xylene (total)	8.97		0.042	0.608
156-59-2	cis-1,2-Dichloroethene	2.96		0.010	0.304

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-15-F MS

Lab Name: GCAL

Contract: \_\_\_\_\_

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 4.91 (g/ml) g

Lab Sample ID: 21101140502

Level: (low/med) LOW

Lab File ID: 2110116/a8972

% Moisture: not dec. 16.2

Date Collected: 01/13/11

Time: 1400

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1401

Soil Extract Volume: \_\_\_\_\_ (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: \_\_\_\_\_ (µL)

Prep Batch: \_\_\_\_\_

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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10061-01-5	cis-1,3-Dichloropropene	2.96		0.00881	0.304
136777-61-	m,p-Xylene	5.97		0.031	0.304
104-51-8	n-Butylbenzene	2.95		0.021	0.304
103-65-1	n-Propylbenzene	3.01		0.016	0.304
95-47-6	o-Xylene	3.00		0.011	0.304
135-98-8	sec-Butylbenzene	2.97		0.015	0.304
1634-04-4	tert-Butyl methyl ether (MTBE)	2.77		0.010	0.304
98-06-6	tert-Butylbenzene	2.97		0.014	0.304
156-60-5	trans-1,2-Dichloroethene	2.97		0.012	0.304
10061-02-6	trans-1,3-Dichloropropene	2.88		0.013	0.304
110-57-6	trans-1,4-Dichloro-2-butene	2.67		0.035	0.304

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-15-F MSD

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 6.03 (g/ml) g

Lab Sample ID: 21101140503

Level: (low/med) LOW

Lab File ID: 2110116/a8973

% Moisture: not dec. 16.2

Date Collected: 01/13/11

Time: 1400

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1425

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

**CAS NO. COMPOUND RESULT Q MDL RL**

630-20-6	1,1,1,2-Tetrachloroethane	2.38		0.00520	0.247
71-55-6	1,1,1-Trichloroethane	2.30		0.011	0.247
79-34-5	1,1,2,2-Tetrachloroethane	2.36		0.014	0.247
79-00-5	1,1,2-Trichloroethane	2.27		0.012	0.247
75-34-3	1,1-Dichloroethane	2.34		0.016	0.247
75-35-4	1,1-Dichloroethene	2.28		0.033	0.247
563-58-6	1,1-Dichloropropene	2.30		0.010	0.247
96-18-4	1,2,3-Trichloropropane	2.21		0.017	0.099
120-82-1	1,2,4-Trichlorobenzene	2.30		0.015	0.247
95-63-6	1,2,4-Trimethylbenzene	2.34		0.015	0.247
96-12-8	1,2-Dibromo-3-chloropropane	2.30		0.040	0.247
106-93-4	1,2-Dibromoethane	2.28		0.012	0.247
95-50-1	1,2-Dichlorobenzene	2.39		0.016	0.247
107-06-2	1,2-Dichloroethane	2.33		0.00648	0.247
78-87-5	1,2-Dichloropropane	2.34		0.00535	0.247
108-67-8	1,3,5-Trimethylbenzene	2.34		0.012	0.247
541-73-1	1,3-Dichlorobenzene	2.35		0.016	0.247
142-28-9	1,3-Dichloropropane	2.30		0.00886	0.247
106-46-7	1,4-Dichlorobenzene	2.36		0.020	0.247
594-20-7	2,2-Dichloropropane	2.24		0.057	0.247
78-93-3	2-Butanone	2.54		0.030	0.247
110-75-8	2-Chloroethylvinyl ether	1.91		0.012	0.247
95-49-8	2-Chlorotoluene	2.36		0.013	0.247
591-78-6	2-Hexanone	2.55		0.017	0.247
106-43-4	4-Chlorotoluene	2.35		0.015	0.247
99-87-6	4-Isopropyltoluene	2.32		0.013	0.247
108-10-1	4-Methyl-2-pentanone	2.39		0.017	0.247
67-64-1	Acetone	2.60		0.052	1.24
107-02-8	Acrolein	2.45		0.099	1.24
107-13-1	Acrylonitrile	11.7		0.053	1.24
71-43-2	Benzene	2.36		0.00678	0.247

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-15-F MSD

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 6.03 (g/ml) g

Lab Sample ID: 21101140503

Level: (low/med) LOW

Lab File ID: 2110116/a8973

% Moisture: not dec. 16.2

Date Collected: 01/13/11

Time: 1400

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1425

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-86-1	Bromobenzene	2.36		0.015	0.247
75-27-4	Bromodichloromethane	2.35		0.00742	0.247
75-25-2	Bromoform	2.39		0.011	0.247
74-83-9	Bromomethane	2.27		0.072	0.247
75-15-0	Carbon disulfide	2.27		0.023	0.247
56-23-5	Carbon tetrachloride	2.26		0.012	0.247
108-90-7	Chlorobenzene	2.39		0.00931	0.247
75-00-3	Chloroethane	1.72		0.033	0.247
67-66-3	Chloroform	2.38		0.012	0.247
74-87-3	Chloromethane	2.13		0.037	0.247
110-82-7	Cyclohexane	2.36		0.00871	0.247
124-48-1	Dibromochloromethane	2.30		0.00693	0.247
74-95-3	Dibromomethane	2.28		0.016	0.247
75-71-8	Dichlorodifluoromethane	2.13		0.00549	0.247
100-41-4	Ethylbenzene	2.29		0.010	0.247
87-68-3	Hexachlorobutadiene	2.30		0.012	0.247
98-82-8	Isopropylbenzene (Cumene)	2.33		0.00965	0.247
79-20-9	Methyl Acetate	2.48		0.017	0.247
74-88-4	Methyl iodide	2.58		0.065	0.247
108-87-2	Methylcyclohexane	2.26		0.00812	0.247
75-09-2	Methylene chloride	2.22		0.017	0.495
91-20-3	Naphthalene	2.28		0.041	0.247
100-42-5	Styrene	2.47		0.013	0.247
127-18-4	Tetrachloroethene	2.28		0.010	0.247
108-88-3	Toluene	2.39		0.00990	0.247
79-01-6	Trichloroethene	2.34		0.012	0.247
75-69-4	Trichlorofluoromethane	2.27		0.00663	0.247
76-13-1	Trichlorotrifluoroethane	2.27		0.057	0.247
108-05-4	Vinyl acetate	1.78		0.011	0.247
75-01-4	Vinyl chloride	2.18		0.00668	0.247
1330-20-7	Xylene (total)	7.04		0.034	0.495
156-59-2	cis-1,2-Dichloroethene	2.32		0.00851	0.247

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-15-F MSD

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 6.03 (g/ml) g Lab Sample ID: 21101140503

Level: (low/med) LOW Lab File ID: 2110116/a8973

% Moisture: not dec. 16.2 Date Collected: 01/13/11 Time: 1400

GC Column: RTX-VMS-30 ID: .25 (mm) Date Received: 01/14/11

Instrument ID: MSV11 Date Analyzed: 01/16/11 Time: 1425

Soil Extract Volume: \_\_\_\_\_ (μL) Dilution Factor: 50 Analyst: RJU

Soil Aliquot Volume: \_\_\_\_\_ (μL) Prep Batch: \_\_\_\_\_ Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-01-5	cis-1,3-Dichloropropene	2.39		0.00718	0.247
136777-61-	m,p-Xylene	4.69		0.025	0.247
104-51-8	n-Butylbenzene	2.32		0.017	0.247
103-65-1	n-Propylbenzene	2.34		0.013	0.247
95-47-6	o-Xylene	2.35		0.00936	0.247
135-98-8	sec-Butylbenzene	2.32		0.012	0.247
1634-04-4	tert-Butyl methyl ether (MTBE)	2.34		0.00827	0.247
98-06-6	tert-Butylbenzene	2.32		0.012	0.247
156-60-5	trans-1,2-Dichloroethene	2.32		0.010	0.247
10061-02-6	trans-1,3-Dichloropropene	2.38		0.011	0.247
110-57-6	trans-1,4-Dichloro-2-butene	2.40		0.028	0.247

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-21-F

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.81 (g/ml) g

Lab Sample ID: 21101140504

Level: (low/med) LOW

Lab File ID: 2110116/a8977

% Moisture: not dec. 16.7

Date Collected: 01/13/11

Time: 1445

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1603

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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630-20-6	1,1,1,2-Tetrachloroethane	0.258	U	0.00542	0.258
71-55-6	1,1,1-Trichloroethane	0.258	U	0.012	0.258
79-34-5	1,1,2,2-Tetrachloroethane	0.258	U	0.014	0.258
79-00-5	1,1,2-Trichloroethane	0.258	U	0.012	0.258
75-34-3	1,1-Dichloroethane	0.258	U	0.017	0.258
75-35-4	1,1-Dichloroethene	0.258	U	0.034	0.258
563-58-6	1,1-Dichloropropene	0.258	U	0.011	0.258
96-18-4	1,2,3-Trichloropropane	0.103	U	0.018	0.103
120-82-1	1,2,4-Trichlorobenzene	0.258	U	0.016	0.258
95-63-6	1,2,4-Trimethylbenzene	0.059	J	0.015	0.258
96-12-8	1,2-Dibromo-3-chloropropane	0.258	U	0.041	0.258
106-93-4	1,2-Dibromoethane	0.258	U	0.012	0.258
95-50-1	1,2-Dichlorobenzene	0.258	U	0.017	0.258
107-06-2	1,2-Dichloroethane	0.258	U	0.00676	0.258
78-87-5	1,2-Dichloropropane	0.258	U	0.00558	0.258
108-67-8	1,3,5-Trimethylbenzene	0.258	U	0.012	0.258
541-73-1	1,3-Dichlorobenzene	0.258	U	0.016	0.258
142-28-9	1,3-Dichloropropane	0.258	U	0.00924	0.258
106-46-7	1,4-Dichlorobenzene	0.258	U	0.021	0.258
594-20-7	2,2-Dichloropropane	0.258	U	0.060	0.258
78-93-3	2-Butanone	0.258	U	0.031	0.258
110-75-8	2-Chloroethylvinyl ether	0.258	U	0.012	0.258
95-49-8	2-Chlorotoluene	0.258	U	0.014	0.258
591-78-6	2-Hexanone	0.258	U	0.018	0.258
106-43-4	4-Chlorotoluene	0.258	U	0.016	0.258
99-87-6	4-Isopropyltoluene	0.258	U	0.014	0.258
108-10-1	4-Methyl-2-pentanone	0.258	U	0.018	0.258
67-64-1	Acetone	1.29	U	0.055	1.29
107-02-8	Acrolein	1.29	U	0.103	1.29
107-13-1	Acrylonitrile	1.29	U	0.055	1.29
71-43-2	Benzene	0.258	U	0.00707	0.258

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-21-F

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.81 (g/ml) g

Lab Sample ID: 21101140504

Level: (low/med) LOW

Lab File ID: 2110116/a8977

% Moisture: not dec. 16.7

Date Collected: 01/13/11

Time: 1445

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1603

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-86-1	Bromobenzene	0.258	U	0.016	0.258
75-27-4	Bromodichloromethane	0.258	U	0.00775	0.258
75-25-2	Bromoform	0.258	U	0.012	0.258
74-83-9	Bromomethane	0.258	U	0.075	0.258
75-15-0	Carbon disulfide	0.258	U	0.024	0.258
56-23-5	Carbon tetrachloride	0.258	U	0.012	0.258
108-90-7	Chlorobenzene	0.258	U	0.00971	0.258
75-00-3	Chloroethane	0.258	U	0.034	0.258
67-66-3	Chloroform	0.286		0.013	0.258
74-87-3	Chloromethane	0.258	U	0.039	0.258
110-82-7	Cyclohexane	0.108	J	0.00909	0.258
124-48-1	Dibromochloromethane	0.258	U	0.00723	0.258
74-95-3	Dibromomethane	0.258	U	0.016	0.258
75-71-8	Dichlorodifluoromethane	0.258	U	0.00573	0.258
100-41-4	Ethylbenzene	0.258	U	0.011	0.258
87-68-3	Hexachlorobutadiene	0.179	J	0.012	0.258
98-82-8	Isopropylbenzene (Cumene)	0.236	J	0.010	0.258
79-20-9	Methyl Acetate	0.258	U	0.018	0.258
74-88-4	Methyl iodide	0.258	U	0.068	0.258
108-87-2	Methylcyclohexane	0.258	U	0.00847	0.258
75-09-2	Methylene chloride	0.516	U	0.018	0.516
91-20-3	Naphthalene	0.101	J	0.043	0.258
100-42-5	Styrene	0.258	U	0.014	0.258
127-18-4	Tetrachloroethene	2.50		0.011	0.258
108-88-3	Toluene	0.258	U	0.010	0.258
79-01-6	Trichloroethene	0.118	J	0.012	0.258
75-69-4	Trichlorofluoromethane	0.258	U	0.00692	0.258
76-13-1	Trichlorotrifluoroethane	0.258	U	0.059	0.258
108-05-4	Vinyl acetate	0.258	U	0.011	0.258
75-01-4	Vinyl chloride	0.258	U	0.00697	0.258
1330-20-7	Xylene (total)	0.516	U	0.035	0.516
156-59-2	cis-1,2-Dichloroethene	0.250	J	0.00888	0.258

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-21-F

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.81 (g/ml) g Lab Sample ID: 21101140504

Level: (low/med) LOW Lab File ID: 2110116/a8977

% Moisture: not dec. 16.7 Date Collected: 01/13/11 Time: 1445

GC Column: RTX-VMS-30 ID: .25 (mm) Date Received: 01/14/11

Instrument ID: MSV11 Date Analyzed: 01/16/11 Time: 1603

Soil Extract Volume: \_\_\_\_\_ (µL) Dilution Factor: 50 Analyst: RJU

Soil Aliquot Volume: \_\_\_\_\_ (µL) Prep Batch: \_\_\_\_\_ Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-01-5	cis-1,3-Dichloropropene	0.258	U	0.00749	0.258
136777-61-	m,p-Xylene	0.258	U	0.026	0.258
71-36-3	n-Butyl alcohol	1.29	U	0.945	1.29
104-51-8	n-Butylbenzene	0.258	U	0.018	0.258
103-65-1	n-Propylbenzene	0.258	U	0.014	0.258
95-47-6	o-Xylene	0.258	U	0.00976	0.258
135-98-8	sec-Butylbenzene	0.258	U	0.013	0.258
1634-04-4	tert-Butyl methyl ether (MTBE)	0.258	U	0.00862	0.258
98-06-6	tert-Butylbenzene	0.258	U	0.012	0.258
156-60-5	trans-1,2-Dichloroethene	0.258	U	0.010	0.258
10061-02-6	trans-1,3-Dichloropropene	0.258	U	0.011	0.258
110-57-6	trans-1,4-Dichloro-2-butene	0.258	U	0.029	0.258

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NC-0-0.3

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 4.71 (g/ml) g

Lab Sample ID: 21101140505

Level: (low/med) LOW

Lab File ID: 2110116/a8978

% Moisture: not dec. 17.1

Date Collected: 01/13/11

Time: 1455

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1627

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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630-20-6	1,1,1,2-Tetrachloroethane	0.320	U	0.00672	0.320
71-55-6	1,1,1-Trichloroethane	0.213	J	0.015	0.320
79-34-5	1,1,2,2-Tetrachloroethane	0.320	U	0.018	0.320
79-00-5	1,1,2-Trichloroethane	0.320	U	0.015	0.320
75-34-3	1,1-Dichloroethane	0.320	U	0.021	0.320
75-35-4	1,1-Dichloroethene	0.320	U	0.043	0.320
563-58-6	1,1-Dichloropropene	0.320	U	0.013	0.320
96-18-4	1,2,3-Trichloropropane	0.128	U	0.022	0.128
120-82-1	1,2,4-Trichlorobenzene	0.320	U	0.020	0.320
95-63-6	1,2,4-Trimethylbenzene	0.123	J	0.019	0.320
96-12-8	1,2-Dibromo-3-chloropropane	0.320	U	0.051	0.320
106-93-4	1,2-Dibromoethane	0.320	U	0.015	0.320
95-50-1	1,2-Dichlorobenzene	0.320	U	0.021	0.320
107-06-2	1,2-Dichloroethane	0.603		0.00839	0.320
78-87-5	1,2-Dichloropropane	0.320	U	0.00691	0.320
108-67-8	1,3,5-Trimethylbenzene	0.110	J	0.015	0.320
541-73-1	1,3-Dichlorobenzene	0.320	U	0.020	0.320
142-28-9	1,3-Dichloropropane	0.320	U	0.011	0.320
106-46-7	1,4-Dichlorobenzene	0.320	U	0.026	0.320
594-20-7	2,2-Dichloropropane	0.320	U	0.074	0.320
78-93-3	2-Butanone	0.320	U	0.039	0.320
110-75-8	2-Chloroethylvinyl ether	0.320	U	0.015	0.320
95-49-8	2-Chlorotoluene	0.320	U	0.017	0.320
591-78-6	2-Hexanone	0.320	U	0.022	0.320
106-43-4	4-Chlorotoluene	0.320	U	0.020	0.320
99-87-6	4-Isopropyltoluene	0.320	U	0.017	0.320
108-10-1	4-Methyl-2-pentanone	0.320	U	0.022	0.320
67-64-1	Acetone	1.60	U	0.068	1.60
107-02-8	Acrolein	1.60	U	0.128	1.60
107-13-1	Acrylonitrile	1.60	U	0.069	1.60
71-43-2	Benzene	0.217	J	0.00877	0.320

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NC-0-0.3

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 4.71 (g/ml) g

Lab Sample ID: 21101140505

Level: (low/med) LOW

Lab File ID: 2110116/a8978

% Moisture: not dec. 17.1

Date Collected: 01/13/11

Time: 1455

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1627

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-86-1	Bromobenzene	0.320	U	0.019	0.320
75-27-4	Bromodichloromethane	0.320	U	0.00960	0.320
75-25-2	Bromoform	0.320	U	0.015	0.320
74-83-9	Bromomethane	0.320	U	0.093	0.320
75-15-0	Carbon disulfide	0.320	U	0.030	0.320
56-23-5	Carbon tetrachloride	0.320	U	0.015	0.320
108-90-7	Chlorobenzene	0.320	U	0.012	0.320
75-00-3	Chloroethane	0.320	U	0.042	0.320
67-66-3	Chloroform	0.545		0.016	0.320
74-87-3	Chloromethane	0.320	U	0.048	0.320
110-82-7	Cyclohexane	0.183	J	0.011	0.320
124-48-1	Dibromochloromethane	0.320	U	0.00896	0.320
74-95-3	Dibromomethane	0.320	U	0.020	0.320
75-71-8	Dichlorodifluoromethane	0.320	U	0.00711	0.320
100-41-4	Ethylbenzene	0.818		0.013	0.320
87-68-3	Hexachlorobutadiene	0.320	U	0.015	0.320
98-82-8	Isopropylbenzene (Cumene)	0.942		0.012	0.320
79-20-9	Methyl Acetate	1.03		0.022	0.320
74-88-4	Methyl iodide	0.320	U	0.084	0.320
108-87-2	Methylcyclohexane	0.320	U	0.010	0.320
75-09-2	Methylene chloride	0.062	J	0.022	0.640
91-20-3	Naphthalene	0.490		0.053	0.320
100-42-5	Styrene	0.320	U	0.017	0.320
127-18-4	Tetrachloroethene	0.835		0.013	0.320
108-88-3	Toluene	0.227	J	0.013	0.320
79-01-6	Trichloroethene	1.02		0.015	0.320
75-69-4	Trichlorofluoromethane	0.320	U	0.00858	0.320
76-13-1	Trichlorotrifluoroethane	0.320	U	0.074	0.320
108-05-4	Vinyl acetate	0.320	U	0.014	0.320
75-01-4	Vinyl chloride	0.320	U	0.00864	0.320
1330-20-7	Xylene (total)	0.298	J	0.044	0.640
156-59-2	cis-1,2-Dichloroethene	0.320	U	0.011	0.320

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

NC-0-0.3

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 4.71 (g/ml) g

Lab Sample ID: 21101140505

Level: (low/med) LOW

Lab File ID: 2110116/a8978

% Moisture: not dec. 17.1

Date Collected: 01/13/11

Time: 1455

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1627

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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10061-01-5	cis-1,3-Dichloropropene	0.320	U	0.00928	0.320
136777-61-	m,p-Xylene	0.122	J	0.032	0.320
71-36-3	n-Butyl alcohol	1.60	U	1.17	1.60
104-51-8	n-Butylbenzene	0.320	U	0.022	0.320
103-65-1	n-Propylbenzene	0.320	U	0.017	0.320
95-47-6	o-Xylene	0.176	J	0.012	0.320
135-98-8	sec-Butylbenzene	0.320	U	0.016	0.320
1634-04-4	tert-Butyl methyl ether (MTBE)	0.320	U	0.011	0.320
98-06-6	tert-Butylbenzene	0.320	U	0.015	0.320
156-60-5	trans-1,2-Dichloroethene	0.320	U	0.013	0.320
10061-02-6	trans-1,3-Dichloropropene	0.320	U	0.014	0.320
110-57-6	trans-1,4-Dichloro-2-butene	0.320	U	0.036	0.320

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-2-WEST

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 6.21 (g/ml) g

Lab Sample ID: 21101140506

Level: (low/med) LOW

Lab File ID: 2110118p/k9911

% Moisture: not dec. 20.1

Date Collected: 01/13/11

Time: 1505

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV5

Date Analyzed: 01/18/11

Time: 1541

Soil Extract Volume: (µL)

Dilution Factor: 250

Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449157

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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630-20-6	1,1,1,2-Tetrachloroethane	1.26	U	0.026	1.26
71-55-6	1,1,1-Trichloroethane	1.26	U	0.058	1.26
79-34-5	1,1,2,2-Tetrachloroethane	1.26	U	0.069	1.26
79-00-5	1,1,2-Trichloroethane	1.26	U	0.059	1.26
75-34-3	1,1-Dichloroethane	1.26	U	0.084	1.26
75-35-4	1,1-Dichloroethene	1.26	U	0.168	1.26
563-58-6	1,1-Dichloropropene	1.26	U	0.052	1.26
96-18-4	1,2,3-Trichloropropane	0.504	U	0.087	0.504
120-82-1	1,2,4-Trichlorobenzene	1.26	U	0.077	1.26
95-63-6	1,2,4-Trimethylbenzene	1.26	U	0.075	1.26
96-12-8	1,2-Dibromo-3-chloropropane	1.26	U	0.202	1.26
106-93-4	1,2-Dibromoethane	1.26	U	0.060	1.26
95-50-1	1,2-Dichlorobenzene	1.26	U	0.082	1.26
107-06-2	1,2-Dichloroethane	1.26	U	0.033	1.26
78-87-5	1,2-Dichloropropane	1.26	U	0.027	1.26
108-67-8	1,3,5-Trimethylbenzene	1.26	U	0.061	1.26
541-73-1	1,3-Dichlorobenzene	1.26	U	0.080	1.26
142-28-9	1,3-Dichloropropane	1.26	U	0.045	1.26
106-46-7	1,4-Dichlorobenzene	1.26	U	0.103	1.26
594-20-7	2,2-Dichloropropane	1.26	U	0.292	1.26
78-93-3	2-Butanone	1.26	U	0.152	1.26
110-75-8	2-Chloroethylvinyl ether	1.26	U	0.059	1.26
95-49-8	2-Chlorotoluene	1.26	U	0.066	1.26
591-78-6	2-Hexanone	1.26	U	0.085	1.26
106-43-4	4-Chlorotoluene	1.26	U	0.077	1.26
99-87-6	4-Isopropyltoluene	1.26	U	0.067	1.26
108-10-1	4-Methyl-2-pentanone	1.26	U	0.086	1.26
67-64-1	Acetone	6.29	U	0.267	6.29
107-02-8	Acrolein	6.29	U	0.504	6.29
107-13-1	Acrylonitrile	6.29	U	0.269	6.29
71-43-2	Benzene	1.26	U	0.034	1.26

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-2-WEST

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 6.21 (g/ml) g

Lab Sample ID: 21101140506

Level: (low/med) LOW

Lab File ID: 2110118p/k9911

% Moisture: not dec. 20.1

Date Collected: 01/13/11

Time: 1505

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV5

Date Analyzed: 01/18/11

Time: 1541

Soil Extract Volume: (µL)

Dilution Factor: 250

Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449157

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-86-1	Bromobenzene	1.26	U	0.076	1.26
75-27-4	Bromodichloromethane	1.26	U	0.038	1.26
75-25-2	Bromoform	1.26	U	0.058	1.26
74-83-9	Bromomethane	1.26	U	0.368	1.26
75-15-0	Carbon disulfide	1.26	U	0.117	1.26
56-23-5	Carbon tetrachloride	1.26	U	0.059	1.26
108-90-7	Chlorobenzene	1.26	U	0.047	1.26
75-00-3	Chloroethane	1.26	U	0.166	1.26
67-66-3	Chloroform	1.26	U	0.062	1.26
74-87-3	Chloromethane	1.26	U	0.191	1.26
110-82-7	Cyclohexane	1.26	U	0.044	1.26
124-48-1	Dibromochloromethane	1.26	U	0.035	1.26
74-95-3	Dibromomethane	1.26	U	0.079	1.26
75-71-8	Dichlorodifluoromethane	1.26	U	0.028	1.26
100-41-4	Ethylbenzene	1.26	U	0.052	1.26
87-68-3	Hexachlorobutadiene	1.26	U	0.059	1.26
98-82-8	Isopropylbenzene (Cumene)	32.6		0.049	1.26
79-20-9	Methyl Acetate	1.26	U	0.086	1.26
74-88-4	Methyl iodide	1.26	U	0.330	1.26
108-87-2	Methylcyclohexane	1.26	U	0.041	1.26
75-09-2	Methylene chloride	2.52	U	0.088	2.52
91-20-3	Naphthalene	1.26	U	0.208	1.26
100-42-5	Styrene	1.26	U	0.066	1.26
127-18-4	Tetrachloroethene	1.26	U	0.052	1.26
108-88-3	Toluene	1.26	U	0.050	1.26
79-01-6	Trichloroethene	1.26	U	0.059	1.26
75-69-4	Trichlorofluoromethane	1.26	U	0.034	1.26
76-13-1	Trichlorotrifluoroethane	1.26	U	0.290	1.26
108-05-4	Vinyl acetate	1.26	U	0.056	1.26
75-01-4	Vinyl chloride	1.26	U	0.034	1.26
1330-20-7	Xylene (total)	2.52	U	0.173	2.52
156-59-2	cis-1,2-Dichloroethene	1.26	U	0.043	1.26

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-2-WEST

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 6.21 (g/ml) g Lab Sample ID: 21101140506

Level: (low/med) LOW Lab File ID: 2110118p/k9911

% Moisture: not dec. 20.1 Date Collected: 01/13/11 Time: 1505

GC Column: RTX-VMS-30 ID: .25 (mm) Date Received: 01/14/11

Instrument ID: MSV5 Date Analyzed: 01/18/11 Time: 1541

Soil Extract Volume: \_\_\_\_\_ (µL) Dilution Factor: 250 Analyst: CLH

Soil Aliquot Volume: \_\_\_\_\_ (µL) Prep Batch: \_\_\_\_\_ Analytical Batch: 449157

CONCENTRATION UNITS: mg/kg Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-01-5	cis-1,3-Dichloropropene	1.26	U	0.037	1.26
136777-61-	m,p-Xylene	1.26	U	0.127	1.26
71-36-3	n-Butyl alcohol	6.29	U	4.61	6.29
104-51-8	n-Butylbenzene	1.26	U	0.088	1.26
103-65-1	n-Propylbenzene	1.26	U	0.068	1.26
95-47-6	o-Xylene	1.26	U	0.048	1.26
135-98-8	sec-Butylbenzene	1.26	U	0.063	1.26
1634-04-4	tert-Butyl methyl ether (MTBE)	1.26	U	0.042	1.26
98-06-6	tert-Butylbenzene	1.26	U	0.060	1.26
156-60-5	trans-1,2-Dichloroethene	1.26	U	0.051	1.26
10061-02-6	trans-1,3-Dichloropropene	1.26	U	0.055	1.26
110-57-6	trans-1,4-Dichloro-2-butene	1.26	U	0.143	1.26

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-6-FLOOR

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 4.77 (g/ml) g

Lab Sample ID: 21101140507

Level: (low/med) LOW

Lab File ID: 2110116/a8982

% Moisture: not dec. 26.0

Date Collected: 01/13/11

Time: 1535

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1809

Soil Extract Volume: (µL)

Dilution Factor: 100

Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.709	U	0.015	0.709
71-55-6	1,1,1-Trichloroethane	0.709	U	0.033	0.709
79-34-5	1,1,2,2-Tetrachloroethane	0.709	U	0.039	0.709
79-00-5	1,1,2-Trichloroethane	0.709	U	0.033	0.709
75-34-3	1,1-Dichloroethane	0.709	U	0.047	0.709
75-35-4	1,1-Dichloroethene	0.709	U	0.095	0.709
563-58-6	1,1-Dichloropropene	0.709	U	0.029	0.709
96-18-4	1,2,3-Trichloropropane	0.283	U	0.049	0.283
120-82-1	1,2,4-Trichlorobenzene	0.709	U	0.043	0.709
95-63-6	1,2,4-Trimethylbenzene	0.709	U	0.042	0.709
96-12-8	1,2-Dibromo-3-chloropropane	0.709	U	0.114	0.709
106-93-4	1,2-Dibromoethane	0.709	U	0.034	0.709
95-50-1	1,2-Dichlorobenzene	0.709	U	0.046	0.709
107-06-2	1,2-Dichloroethane	0.709	U	0.019	0.709
78-87-5	1,2-Dichloropropane	0.709	U	0.015	0.709
108-67-8	1,3,5-Trimethylbenzene	0.709	U	0.034	0.709
541-73-1	1,3-Dichlorobenzene	0.709	U	0.045	0.709
142-28-9	1,3-Dichloropropane	0.709	U	0.025	0.709
106-46-7	1,4-Dichlorobenzene	0.709	U	0.058	0.709
594-20-7	2,2-Dichloropropane	0.709	U	0.164	0.709
78-93-3	2-Butanone	0.709	U	0.085	0.709
110-75-8	2-Chloroethylvinyl ether	0.709	U	0.033	0.709
95-49-8	2-Chlorotoluene	0.709	U	0.037	0.709
591-78-6	2-Hexanone	0.709	U	0.048	0.709
106-43-4	4-Chlorotoluene	0.709	U	0.043	0.709
99-87-6	4-Isopropyltoluene	0.709	U	0.038	0.709
108-10-1	4-Methyl-2-pentanone	0.709	U	0.048	0.709
67-64-1	Acetone	3.54	U	0.150	3.54
107-02-8	Acrolein	3.54	U	0.283	3.54
107-13-1	Acrylonitrile	3.54	U	0.152	3.54
71-43-2	Benzene	1.33		0.019	0.709

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-6-FLOOR

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 4.77 (g/ml) g

Lab Sample ID: 21101140507

Level: (low/med) LOW

Lab File ID: 2110116/a8982

% Moisture: not dec. 26.0

Date Collected: 01/13/11

Time: 1535

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1809

Soil Extract Volume: (µL)

Dilution Factor: 100

Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-86-1	Bromobenzene	0.709	U	0.043	0.709
75-27-4	Bromodichloromethane	0.709	U	0.021	0.709
75-25-2	Bromoform	0.709	U	0.033	0.709
74-83-9	Bromomethane	0.709	U	0.207	0.709
75-15-0	Carbon disulfide	0.709	U	0.066	0.709
56-23-5	Carbon tetrachloride	0.709	U	0.033	0.709
108-90-7	Chlorobenzene	0.709	U	0.027	0.709
75-00-3	Chloroethane	0.709	U	0.093	0.709
67-66-3	Chloroform	0.709	U	0.035	0.709
74-87-3	Chloromethane	0.709	U	0.107	0.709
110-82-7	Cyclohexane	0.709	U	0.025	0.709
124-48-1	Dibromochloromethane	0.709	U	0.020	0.709
74-95-3	Dibromomethane	0.709	U	0.044	0.709
75-71-8	Dichlorodifluoromethane	0.709	U	0.016	0.709
100-41-4	Ethylbenzene	9.44		0.029	0.709
87-68-3	Hexachlorobutadiene	0.709	U	0.033	0.709
98-82-8	Isopropylbenzene (Cumene)	12.6		0.028	0.709
79-20-9	Methyl Acetate	0.709	U	0.048	0.709
74-88-4	Methyl iodide	0.709	U	0.186	0.709
108-87-2	Methylcyclohexane	0.709	U	0.023	0.709
75-09-2	Methylene chloride	1.42	U	0.049	1.42
91-20-3	Naphthalene	0.709	U	0.117	0.709
100-42-5	Styrene	0.709	U	0.037	0.709
127-18-4	Tetrachloroethene	0.709	U	0.029	0.709
108-88-3	Toluene	1.00		0.028	0.709
79-01-6	Trichloroethene	0.709	U	0.033	0.709
75-69-4	Trichlorofluoromethane	0.709	U	0.019	0.709
76-13-1	Trichlorotrifluoroethane	0.709	U	0.163	0.709
108-05-4	Vinyl acetate	0.709	U	0.031	0.709
75-01-4	Vinyl chloride	0.709	U	0.019	0.709
1330-20-7	Xylene (total)	1.95		0.097	1.42
156-59-2	cis-1,2-Dichloroethene	0.709	U	0.024	0.709

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-6-FLOOR

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 4.77 (g/ml) g Lab Sample ID: 21101140507

Level: (low/med) LOW Lab File ID: 2110116/a8982

% Moisture: not dec. 26.0 Date Collected: 01/13/11 Time: 1535

GC Column: RTX-VMS-30 ID: .25 (mm) Date Received: 01/14/11

Instrument ID: MSV11 Date Analyzed: 01/16/11 Time: 1809

Soil Extract Volume: \_\_\_\_\_ (µL) Dilution Factor: 100 Analyst: CLH

Soil Aliquot Volume: \_\_\_\_\_ (µL) Prep Batch: \_\_\_\_\_ Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-01-5	cis-1,3-Dichloropropene	0.709	U	0.021	0.709
136777-61-	m,p-Xylene	0.709	U	0.071	0.709
71-36-3	n-Butyl alcohol	3.54	U	2.59	3.54
104-51-8	n-Butylbenzene	0.709	U	0.049	0.709
103-65-1	n-Propylbenzene	0.709	U	0.038	0.709
95-47-6	o-Xylene	1.95		0.027	0.709
135-98-8	sec-Butylbenzene	0.709	U	0.036	0.709
1634-04-4	tert-Butyl methyl ether (MTBE)	0.234	J	0.024	0.709
98-06-6	tert-Butylbenzene	0.709	U	0.034	0.709
156-60-5	trans-1,2-Dichloroethene	0.709	U	0.029	0.709
10061-02-6	trans-1,3-Dichloropropene	0.709	U	0.031	0.709
110-57-6	trans-1,4-Dichloro-2-butene	0.709	U	0.080	0.709

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-6-EAST

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.13 (g/ml) g

Lab Sample ID: 21101140508

Level: (low/med) LOW

Lab File ID: 2110116/a8984

% Moisture: not dec. 26.5

Date Collected: 01/13/11

Time: 1555

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1857

Soil Extract Volume: (µL)

Dilution Factor: 10000

Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	66.3	U	1.39	66.3
71-55-6	1,1,1-Trichloroethane	66.3	U	3.06	66.3
79-34-5	1,1,2,2-Tetrachloroethane	66.3	U	3.66	66.3
79-00-5	1,1,2-Trichloroethane	66.3	U	3.12	66.3
75-34-3	1,1-Dichloroethane	66.3	U	4.40	66.3
75-35-4	1,1-Dichloroethene	66.3	U	8.84	66.3
563-58-6	1,1-Dichloropropene	66.3	U	2.76	66.3
96-18-4	1,2,3-Trichloropropane	26.5	U	4.60	26.5
120-82-1	1,2,4-Trichlorobenzene	66.3	U	4.04	66.3
95-63-6	1,2,4-Trimethylbenzene	66.3	U	3.95	66.3
96-12-8	1,2-Dibromo-3-chloropropane	66.3	U	10.6	66.3
106-93-4	1,2-Dibromoethane	66.3	U	3.17	66.3
95-50-1	1,2-Dichlorobenzene	66.3	U	4.31	66.3
107-06-2	1,2-Dichloroethane	66.3	U	1.74	66.3
78-87-5	1,2-Dichloropropane	66.3	U	1.43	66.3
108-67-8	1,3,5-Trimethylbenzene	66.3	U	3.20	66.3
541-73-1	1,3-Dichlorobenzene	66.3	U	4.23	66.3
142-28-9	1,3-Dichloropropane	66.3	U	2.37	66.3
106-46-7	1,4-Dichlorobenzene	66.3	U	5.45	66.3
594-20-7	2,2-Dichloropropane	66.3	U	15.4	66.3
78-93-3	2-Butanone	66.3	U	7.99	66.3
110-75-8	2-Chloroethylvinyl ether	66.3	U	3.10	66.3
95-49-8	2-Chlorotoluene	66.3	U	3.50	66.3
591-78-6	2-Hexanone	66.3	U	4.49	66.3
106-43-4	4-Chlorotoluene	66.3	U	4.06	66.3
99-87-6	4-Isopropyltoluene	66.3	U	3.53	66.3
108-10-1	4-Methyl-2-pentanone	66.3	U	4.52	66.3
67-64-1	Acetone	331	U	14.1	331
107-02-8	Acrolein	331	U	26.5	331
107-13-1	Acrylonitrile	331	U	14.2	331
71-43-2	Benzene	18.2	J	1.82	66.3

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-6-EAST

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.13 (g/ml) g

Lab Sample ID: 21101140508

Level: (low/med) LOW

Lab File ID: 2110116/a8984

% Moisture: not dec. 26.5

Date Collected: 01/13/11

Time: 1555

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1857

Soil Extract Volume: (µL)

Dilution Factor: 10000

Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-86-1	Bromobenzene	66.3	U	3.99	66.3
75-27-4	Bromodichloromethane	66.3	U	1.99	66.3
75-25-2	Bromoform	66.3	U	3.06	66.3
74-83-9	Bromomethane	66.3	U	19.4	66.3
75-15-0	Carbon disulfide	66.3	U	6.17	66.3
56-23-5	Carbon tetrachloride	66.3	U	3.13	66.3
108-90-7	Chlorobenzene	66.3	U	2.49	66.3
75-00-3	Chloroethane	66.3	U	8.74	66.3
67-66-3	Chloroform	66.3	U	3.26	66.3
74-87-3	Chloromethane	66.3	U	10.0	66.3
110-82-7	Cyclohexane	66.3	U	2.33	66.3
124-48-1	Dibromochloromethane	66.3	U	1.86	66.3
74-95-3	Dibromomethane	66.3	U	4.16	66.3
75-71-8	Dichlorodifluoromethane	66.3	U	1.47	66.3
100-41-4	Ethylbenzene	272		2.73	66.3
87-68-3	Hexachlorobutadiene	66.3	U	3.09	66.3
98-82-8	Isopropylbenzene (Cumene)	1660		2.59	66.3
79-20-9	Methyl Acetate	66.3	U	4.53	66.3
74-88-4	Methyl iodide	66.3	U	17.4	66.3
108-87-2	Methylcyclohexane	66.3	U	2.17	66.3
75-09-2	Methylene chloride	133	U	4.61	133
91-20-3	Naphthalene	66.3	U	10.9	66.3
100-42-5	Styrene	21.8	J	3.50	66.3
127-18-4	Tetrachloroethene	66.3	U	2.74	66.3
108-88-3	Toluene	37.0	J	2.65	66.3
79-01-6	Trichloroethene	66.3	U	3.10	66.3
75-69-4	Trichlorofluoromethane	66.3	U	1.78	66.3
76-13-1	Trichlorotrifluoroethane	66.3	U	15.2	66.3
108-05-4	Vinyl acetate	66.3	U	2.94	66.3
75-01-4	Vinyl chloride	66.3	U	1.79	66.3
1330-20-7	Xylene (total)	167		9.10	133
156-59-2	cis-1,2-Dichloroethene	66.3	U	2.28	66.3

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-6-EAST

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.13 (g/ml) g

Lab Sample ID: 21101140508

Level: (low/med) LOW

Lab File ID: 2110116/a8984

% Moisture: not dec. 26.5

Date Collected: 01/13/11

Time: 1555

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1857

Soil Extract Volume: (µL)

Dilution Factor: 10000

Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-01-5	cis-1,3-Dichloropropene	66.3	U	1.92	66.3
136777-61-	m,p-Xylene	66.3	U	6.67	66.3
71-36-3	n-Butyl alcohol	331	U	243	331
104-51-8	n-Butylbenzene	66.3	U	4.63	66.3
103-65-1	n-Propylbenzene	66.3	U	3.59	66.3
95-47-6	o-Xylene	167		2.51	66.3
135-98-8	sec-Butylbenzene	66.3	U	3.33	66.3
1634-04-4	tert-Butyl methyl ether (MTBE)	66.3	U	2.21	66.3
98-06-6	tert-Butylbenzene	66.3	U	3.14	66.3
156-60-5	trans-1,2-Dichloroethene	66.3	U	2.68	66.3
10061-02-6	trans-1,3-Dichloropropene	66.3	U	2.92	66.3
110-57-6	trans-1,4-Dichloro-2-butene	66.3	U	7.53	66.3

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-6-SOUTH

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.23 (g/ml) g

Lab Sample ID: 21101140509

Level: (low/med) LOW

Lab File ID: 2110116/a8985

% Moisture: not dec. 26.1

Date Collected: 01/13/11

Time: 1615

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1922

Soil Extract Volume: (µL)

Dilution Factor: 10000

Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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630-20-6	1,1,1,2-Tetrachloroethane	64.7	U	1.36	64.7
71-55-6	1,1,1-Trichloroethane	64.7	U	2.99	64.7
79-34-5	1,1,2,2-Tetrachloroethane	64.7	U	3.57	64.7
79-00-5	1,1,2-Trichloroethane	64.7	U	3.04	64.7
75-34-3	1,1-Dichloroethane	64.7	U	4.30	64.7
75-35-4	1,1-Dichloroethene	64.7	U	8.63	64.7
563-58-6	1,1-Dichloropropene	64.7	U	2.69	64.7
96-18-4	1,2,3-Trichloropropane	25.9	U	4.49	25.9
120-82-1	1,2,4-Trichlorobenzene	64.7	U	3.95	64.7
95-63-6	1,2,4-Trimethylbenzene	64.7	U	3.86	64.7
96-12-8	1,2-Dibromo-3-chloropropane	64.7	U	10.4	64.7
106-93-4	1,2-Dibromoethane	64.7	U	3.09	64.7
95-50-1	1,2-Dichlorobenzene	64.7	U	4.21	64.7
107-06-2	1,2-Dichloroethane	64.7	U	1.70	64.7
78-87-5	1,2-Dichloropropane	64.7	U	1.40	64.7
108-67-8	1,3,5-Trimethylbenzene	64.7	U	3.12	64.7
541-73-1	1,3-Dichlorobenzene	64.7	U	4.13	64.7
142-28-9	1,3-Dichloropropane	64.7	U	2.32	64.7
106-46-7	1,4-Dichlorobenzene	64.7	U	5.32	64.7
594-20-7	2,2-Dichloropropane	64.7	U	15.0	64.7
78-93-3	2-Butanone	64.7	U	7.80	64.7
110-75-8	2-Chloroethylvinyl ether	64.7	U	3.03	64.7
95-49-8	2-Chlorotoluene	64.7	U	3.42	64.7
591-78-6	2-Hexanone	64.7	U	4.39	64.7
106-43-4	4-Chlorotoluene	64.7	U	3.96	64.7
99-87-6	4-Isopropyltoluene	64.7	U	3.44	64.7
108-10-1	4-Methyl-2-pentanone	64.7	U	4.41	64.7
67-64-1	Acetone	324	U	13.7	324
107-02-8	Acrolein	324	U	25.9	324
107-13-1	Acrylonitrile	324	U	13.8	324
71-43-2	Benzene	13.8	J	1.77	64.7

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-6-SOUTH

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.23 (g/ml) g

Lab Sample ID: 21101140509

Level: (low/med) LOW

Lab File ID: 2110116/a8985

% Moisture: not dec. 26.1

Date Collected: 01/13/11

Time: 1615

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1922

Soil Extract Volume: (µL)

Dilution Factor: 10000

Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-86-1	Bromobenzene	64.7	U	3.90	64.7
75-27-4	Bromodichloromethane	64.7	U	1.94	64.7
75-25-2	Bromoform	64.7	U	2.99	64.7
74-83-9	Bromomethane	64.7	U	18.9	64.7
75-15-0	Carbon disulfide	64.7	U	6.02	64.7
56-23-5	Carbon tetrachloride	64.7	U	3.05	64.7
108-90-7	Chlorobenzene	64.7	U	2.43	64.7
75-00-3	Chloroethane	64.7	U	8.53	64.7
67-66-3	Chloroform	18.4	J	3.18	64.7
74-87-3	Chloromethane	64.7	U	9.80	64.7
110-82-7	Cyclohexane	64.7	U	2.28	64.7
124-48-1	Dibromochloromethane	64.7	U	1.81	64.7
74-95-3	Dibromomethane	64.7	U	4.06	64.7
75-71-8	Dichlorodifluoromethane	64.7	U	1.44	64.7
100-41-4	Ethylbenzene	321		2.67	64.7
87-68-3	Hexachlorobutadiene	64.7	U	3.02	64.7
98-82-8	Isopropylbenzene (Cumene)	543		2.52	64.7
79-20-9	Methyl Acetate	64.7	U	4.43	64.7
74-88-4	Methyl iodide	64.7	U	17.0	64.7
108-87-2	Methylcyclohexane	64.7	U	2.12	64.7
75-09-2	Methylene chloride	129	U	4.50	129
91-20-3	Naphthalene	16.4	J	10.7	64.7
100-42-5	Styrene	15.2	J	3.42	64.7
127-18-4	Tetrachloroethene	64.7	U	2.68	64.7
108-88-3	Toluene	23.8	J	2.59	64.7
79-01-6	Trichloroethene	64.7	U	3.03	64.7
75-69-4	Trichlorofluoromethane	64.7	U	1.73	64.7
76-13-1	Trichlorotrifluoroethane	64.7	U	14.9	64.7
108-05-4	Vinyl acetate	64.7	U	2.87	64.7
75-01-4	Vinyl chloride	64.7	U	1.75	64.7
1330-20-7	Xylene (total)	68.6	J	8.88	129
156-59-2	cis-1,2-Dichloroethene	64.7	U	2.23	64.7

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-6-SOUTH

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.23 (g/ml) g

Lab Sample ID: 21101140509

Level: (low/med) LOW

Lab File ID: 2110116/a8985

% Moisture: not dec. 26.1

Date Collected: 01/13/11

Time: 1615

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1922

Soil Extract Volume: (µL)

Dilution Factor: 10000

Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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10061-01-5	cis-1,3-Dichloropropene	64.7	U	1.88	64.7
136777-61-	m,p-Xylene	64.7	U	6.51	64.7
71-36-3	n-Butyl alcohol	324	U	237	324
104-51-8	n-Butylbenzene	64.7	U	4.52	64.7
103-65-1	n-Propylbenzene	64.7	U	3.51	64.7
95-47-6	o-Xylene	68.6		2.45	64.7
135-98-8	sec-Butylbenzene	64.7	U	3.25	64.7
1634-04-4	tert-Butyl methyl ether (MTBE)	64.7	U	2.16	64.7
98-06-6	tert-Butylbenzene	64.7	U	3.07	64.7
156-60-5	trans-1,2-Dichloroethene	64.7	U	2.61	64.7
10061-02-6	trans-1,3-Dichloropropene	64.7	U	2.85	64.7
110-57-6	trans-1,4-Dichloro-2-butene	64.7	U	7.35	64.7

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-6-NORTH

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.87 (g/ml) g

Lab Sample ID: 21101140510

Level: (low/med) LOW

Lab File ID: 2110116/a8979

% Moisture: not dec. 22.5

Date Collected: 01/13/11

Time: 1625

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1651

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.275	U	0.00577	0.275
71-55-6	1,1,1-Trichloroethane	0.087	J	0.013	0.275
79-34-5	1,1,2,2-Tetrachloroethane	0.275	U	0.015	0.275
79-00-5	1,1,2-Trichloroethane	0.275	U	0.013	0.275
75-34-3	1,1-Dichloroethane	0.275	U	0.018	0.275
75-35-4	1,1-Dichloroethene	0.275	U	0.037	0.275
563-58-6	1,1-Dichloropropene	0.275	U	0.011	0.275
96-18-4	1,2,3-Trichloropropane	0.110	U	0.019	0.110
120-82-1	1,2,4-Trichlorobenzene	0.275	U	0.017	0.275
95-63-6	1,2,4-Trimethylbenzene	0.230	J	0.016	0.275
96-12-8	1,2-Dibromo-3-chloropropane	0.275	U	0.044	0.275
106-93-4	1,2-Dibromoethane	0.275	U	0.013	0.275
95-50-1	1,2-Dichlorobenzene	0.275	U	0.018	0.275
107-06-2	1,2-Dichloroethane	0.275	U	0.00720	0.275
78-87-5	1,2-Dichloropropane	0.275	U	0.00593	0.275
108-67-8	1,3,5-Trimethylbenzene	0.094	J	0.013	0.275
541-73-1	1,3-Dichlorobenzene	0.275	U	0.018	0.275
142-28-9	1,3-Dichloropropane	0.275	U	0.00983	0.275
106-46-7	1,4-Dichlorobenzene	0.275	U	0.023	0.275
594-20-7	2,2-Dichloropropane	0.275	U	0.064	0.275
78-93-3	2-Butanone	0.275	U	0.033	0.275
110-75-8	2-Chloroethylvinyl ether	0.275	U	0.013	0.275
95-49-8	2-Chlorotoluene	0.275	U	0.015	0.275
591-78-6	2-Hexanone	0.275	U	0.019	0.275
106-43-4	4-Chlorotoluene	0.275	U	0.017	0.275
99-87-6	4-Isopropyltoluene	0.275	U	0.015	0.275
108-10-1	4-Methyl-2-pentanone	0.275	U	0.019	0.275
67-64-1	Acetone	1.37	U	0.058	1.37
107-02-8	Acrolein	1.37	U	0.110	1.37
107-13-1	Acrylonitrile	1.37	U	0.059	1.37
71-43-2	Benzene	2.94		0.00753	0.275

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-6-NORTH

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.87 (g/ml) g

Lab Sample ID: 21101140510

Level: (low/med) LOW

Lab File ID: 2110116/a8979

% Moisture: not dec. 22.5

Date Collected: 01/13/11

Time: 1625

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1651

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

Analytical Method: SW-846 8260

CONCENTRATION UNITS: mg/kg

**CAS NO. COMPOUND RESULT Q MDL RL**

108-86-1	Bromobenzene	0.275	U	0.017	0.275
75-27-4	Bromodichloromethane	0.275	U	0.00824	0.275
75-25-2	Bromoform	0.275	U	0.013	0.275
74-83-9	Bromomethane	0.275	U	0.080	0.275
75-15-0	Carbon disulfide	0.275	U	0.026	0.275
56-23-5	Carbon tetrachloride	0.275	U	0.013	0.275
108-90-7	Chlorobenzene	0.275	U	0.010	0.275
75-00-3	Chloroethane	0.275	U	0.036	0.275
67-66-3	Chloroform	0.293		0.014	0.275
74-87-3	Chloromethane	0.275	U	0.042	0.275
110-82-7	Cyclohexane	0.063	J	0.00967	0.275
124-48-1	Dibromochloromethane	0.275	U	0.00769	0.275
74-95-3	Dibromomethane	0.275	U	0.017	0.275
75-71-8	Dichlorodifluoromethane	0.275	U	0.00610	0.275
100-41-4	Ethylbenzene	1.83		0.011	0.275
87-68-3	Hexachlorobutadiene	0.275	U	0.013	0.275
98-82-8	Isopropylbenzene (Cumene)	0.221	J	0.011	0.275
79-20-9	Methyl Acetate	0.275	U	0.019	0.275
74-88-4	Methyl iodide	0.275	U	0.072	0.275
108-87-2	Methylcyclohexane	0.275	U	0.00901	0.275
75-09-2	Methylene chloride	0.549	U	0.019	0.549
91-20-3	Naphthalene	0.427		0.045	0.275
100-42-5	Styrene	0.275	U	0.015	0.275
127-18-4	Tetrachloroethene	0.275	U	0.011	0.275
108-88-3	Toluene	0.271	J	0.011	0.275
79-01-6	Trichloroethene	0.174	J	0.013	0.275
75-69-4	Trichlorofluoromethane	0.275	U	0.00736	0.275
76-13-1	Trichlorotrifluoroethane	0.275	U	0.063	0.275
108-05-4	Vinyl acetate	0.275	U	0.012	0.275
75-01-4	Vinyl chloride	0.275	U	0.00742	0.275
1330-20-7	Xylene (total)	1.02		0.038	0.549
156-59-2	cis-1,2-Dichloroethene	0.275	U	0.00945	0.275

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

T-6-NORTH

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.87 (g/ml) g Lab Sample ID: 21101140510

Level: (low/med) LOW Lab File ID: 2110116/a8979

% Moisture: not dec. 22.5 Date Collected: 01/13/11 Time: 1625

GC Column: RTX-VMS-30 ID: .25 (mm) Date Received: 01/14/11

Instrument ID: MSV11 Date Analyzed: 01/16/11 Time: 1651

Soil Extract Volume: \_\_\_\_\_ (µL) Dilution Factor: 50 Analyst: RJU

Soil Aliquot Volume: \_\_\_\_\_ (µL) Prep Batch: \_\_\_\_\_ Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-01-5	cis-1,3-Dichloropropene	0.275	U	0.00796	0.275
136777-61-	m,p-Xylene	0.664		0.028	0.275
71-36-3	n-Butyl alcohol	1.37	U	1.01	1.37
104-51-8	n-Butylbenzene	0.275	U	0.019	0.275
103-65-1	n-Propylbenzene	0.155	J	0.015	0.275
95-47-6	o-Xylene	0.357		0.010	0.275
135-98-8	sec-Butylbenzene	0.275	U	0.014	0.275
1634-04-4	tert-Butyl methyl ether (MTBE)	0.479		0.00917	0.275
98-06-6	tert-Butylbenzene	0.275	U	0.013	0.275
156-60-5	trans-1,2-Dichloroethene	0.275	U	0.011	0.275
10061-02-6	trans-1,3-Dichloropropene	0.275	U	0.012	0.275
110-57-6	trans-1,4-Dichloro-2-butene	0.275	U	0.031	0.275

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BLIND DUP

Lab Name: GCAL

Contract: \_\_\_\_\_

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.71 (g/ml) g

Lab Sample ID: 21101140511

Level: (low/med) LOW

Lab File ID: 2110116/a8986

% Moisture: not dec. 24.1

Date Collected: 01/13/11

Time: 0000

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1946

Soil Extract Volume: \_\_\_\_\_ (µL)

Dilution Factor: 10000

Analyst: CLH

Soil Aliquot Volume: \_\_\_\_\_ (µL)

Prep Batch: \_\_\_\_\_

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

**CAS NO.      COMPOUND      RESULT      Q      MDL      RL**

630-20-6	1,1,1,2-Tetrachloroethane	57.7	U	1.21	57.7
71-55-6	1,1,1-Trichloroethane	57.7	U	2.67	57.7
79-34-5	1,1,2,2-Tetrachloroethane	57.7	U	3.19	57.7
79-00-5	1,1,2-Trichloroethane	57.7	U	2.71	57.7
75-34-3	1,1-Dichloroethane	57.7	U	3.83	57.7
75-35-4	1,1-Dichloroethene	57.7	U	7.70	57.7
563-58-6	1,1-Dichloropropene	57.7	U	2.40	57.7
96-18-4	1,2,3-Trichloropropane	23.1	U	4.01	23.1
120-82-1	1,2,4-Trichlorobenzene	57.7	U	3.52	57.7
95-63-6	1,2,4-Trimethylbenzene	57.7	U	3.44	57.7
96-12-8	1,2-Dibromo-3-chloropropane	57.7	U	9.25	57.7
106-93-4	1,2-Dibromoethane	57.7	U	2.76	57.7
95-50-1	1,2-Dichlorobenzene	57.7	U	3.75	57.7
107-06-2	1,2-Dichloroethane	57.7	U	1.51	57.7
78-87-5	1,2-Dichloropropane	57.7	U	1.25	57.7
108-67-8	1,3,5-Trimethylbenzene	57.7	U	2.78	57.7
541-73-1	1,3-Dichlorobenzene	57.7	U	3.68	57.7
142-28-9	1,3-Dichloropropane	57.7	U	2.07	57.7
106-46-7	1,4-Dichlorobenzene	57.7	U	4.74	57.7
594-20-7	2,2-Dichloropropane	57.7	U	13.4	57.7
78-93-3	2-Butanone	57.7	U	6.96	57.7
110-75-8	2-Chloroethylvinyl ether	57.7	U	2.70	57.7
95-49-8	2-Chlorotoluene	57.7	U	3.05	57.7
591-78-6	2-Hexanone	57.7	U	3.91	57.7
106-43-4	4-Chlorotoluene	57.7	U	3.53	57.7
99-87-6	4-Isopropyltoluene	57.7	U	3.07	57.7
108-10-1	4-Methyl-2-pentanone	57.7	U	3.94	57.7
67-64-1	Acetone	289	U	12.2	289
107-02-8	Acrolein	289	U	23.1	289
107-13-1	Acrylonitrile	289	U	12.4	289
71-43-2	Benzene	13.1	J	1.58	57.7

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BLIND DUP

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.71 (g/ml) g

Lab Sample ID: 21101140511

Level: (low/med) LOW

Lab File ID: 2110116/a8986

% Moisture: not dec. 24.1

Date Collected: 01/13/11

Time: 0000

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1946

Soil Extract Volume: (µL)

Dilution Factor: 10000

Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

**CAS NO. COMPOUND RESULT Q MDL RL**

108-86-1	Bromobenzene	57.7	U	3.47	57.7
75-27-4	Bromodichloromethane	57.7	U	1.73	57.7
75-25-2	Bromoform	57.7	U	2.67	57.7
74-83-9	Bromomethane	57.7	U	16.9	57.7
75-15-0	Carbon disulfide	57.7	U	5.37	57.7
56-23-5	Carbon tetrachloride	57.7	U	2.72	57.7
108-90-7	Chlorobenzene	57.7	U	2.17	57.7
75-00-3	Chloroethane	57.7	U	7.61	57.7
67-66-3	Chloroform	57.7	U	2.84	57.7
74-87-3	Chloromethane	57.7	U	8.74	57.7
110-82-7	Cyclohexane	57.7	U	2.03	57.7
124-48-1	Dibromochloromethane	57.7	U	1.62	57.7
74-95-3	Dibromomethane	57.7	U	3.62	57.7
75-71-8	Dichlorodifluoromethane	57.7	U	1.28	57.7
100-41-4	Ethylbenzene	156		2.38	57.7
87-68-3	Hexachlorobutadiene	57.7	U	2.69	57.7
98-82-8	Isopropylbenzene (Cumene)	924		2.25	57.7
79-20-9	Methyl Acetate	57.7	U	3.95	57.7
74-88-4	Methyl iodide	57.7	U	15.1	57.7
108-87-2	Methylcyclohexane	57.7	U	1.89	57.7
75-09-2	Methylene chloride	115	U	4.02	115
91-20-3	Naphthalene	15.7	J	9.52	57.7
100-42-5	Styrene	15.2	J	3.05	57.7
127-18-4	Tetrachloroethene	57.7	U	2.39	57.7
108-88-3	Toluene	19.2	J	2.31	57.7
79-01-6	Trichloroethene	57.7	U	2.70	57.7
75-69-4	Trichlorofluoromethane	57.7	U	1.55	57.7
76-13-1	Trichlorotrifluoroethane	57.7	U	13.3	57.7
108-05-4	Vinyl acetate	57.7	U	2.56	57.7
75-01-4	Vinyl chloride	57.7	U	1.56	57.7
1330-20-7	Xylene (total)	98.9	J	7.92	115
156-59-2	cis-1,2-Dichloroethene	57.7	U	1.99	57.7

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BLIND DUP

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.71 (g/ml) g Lab Sample ID: 21101140511

Level: (low/med) LOW Lab File ID: 2110116/a8986

% Moisture: not dec. 24.1 Date Collected: 01/13/11 Time: 0000

GC Column: RTX-VMS-30 ID: .25 (mm) Date Received: 01/14/11

Instrument ID: MSV11 Date Analyzed: 01/16/11 Time: 1946

Soil Extract Volume: \_\_\_\_\_ (µL) Dilution Factor: 10000 Analyst: CLH

Soil Aliquot Volume: \_\_\_\_\_ (µL) Prep Batch: \_\_\_\_\_ Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-01-5	cis-1,3-Dichloropropene	57.7	U	1.67	57.7
136777-61-	m,p-Xylene	57.7	U	5.81	57.7
71-36-3	n-Butyl alcohol	289	U	211	289
104-51-8	n-Butylbenzene	57.7	U	4.03	57.7
103-65-1	n-Propylbenzene	57.7	U	3.13	57.7
95-47-6	o-Xylene	98.9		2.18	57.7
135-98-8	sec-Butylbenzene	57.7	U	2.90	57.7
1634-04-4	tert-Butyl methyl ether (MTBE)	57.7	U	1.93	57.7
98-06-6	tert-Butylbenzene	57.7	U	2.74	57.7
156-60-5	trans-1,2-Dichloroethene	57.7	U	2.33	57.7
10061-02-6	trans-1,3-Dichloropropene	57.7	U	2.54	57.7
110-57-6	trans-1,4-Dichloro-2-butene	57.7	U	6.56	57.7

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SC-W

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.85 (g/ml) g

Lab Sample ID: 21101140512

Level: (low/med) LOW

Lab File ID: 2110116/a8980

% Moisture: not dec. 23.5

Date Collected: 01/13/11

Time: 1645

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1715

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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630-20-6	1,1,1,2-Tetrachloroethane	0.279	U	0.00586	0.279
71-55-6	1,1,1-Trichloroethane	0.279	U	0.013	0.279
79-34-5	1,1,2,2-Tetrachloroethane	0.279	U	0.015	0.279
79-00-5	1,1,2-Trichloroethane	0.279	U	0.013	0.279
75-34-3	1,1-Dichloroethane	0.279	U	0.019	0.279
75-35-4	1,1-Dichloroethene	0.279	U	0.037	0.279
563-58-6	1,1-Dichloropropene	0.279	U	0.012	0.279
96-18-4	1,2,3-Trichloropropane	0.112	U	0.019	0.112
120-82-1	1,2,4-Trichlorobenzene	0.279	U	0.017	0.279
95-63-6	1,2,4-Trimethylbenzene	0.111	J	0.017	0.279
96-12-8	1,2-Dibromo-3-chloropropane	0.279	U	0.045	0.279
106-93-4	1,2-Dibromoethane	0.279	U	0.013	0.279
95-50-1	1,2-Dichlorobenzene	0.279	U	0.018	0.279
107-06-2	1,2-Dichloroethane	0.279	U	0.00731	0.279
78-87-5	1,2-Dichloropropane	0.279	U	0.00603	0.279
108-67-8	1,3,5-Trimethylbenzene	0.057	J	0.013	0.279
541-73-1	1,3-Dichlorobenzene	0.279	U	0.018	0.279
142-28-9	1,3-Dichloropropane	0.279	U	0.00999	0.279
106-46-7	1,4-Dichlorobenzene	0.279	U	0.023	0.279
594-20-7	2,2-Dichloropropane	0.279	U	0.065	0.279
78-93-3	2-Butanone	0.279	U	0.034	0.279
110-75-8	2-Chloroethylvinyl ether	0.279	U	0.013	0.279
95-49-8	2-Chlorotoluene	0.279	U	0.015	0.279
591-78-6	2-Hexanone	0.279	U	0.019	0.279
106-43-4	4-Chlorotoluene	0.279	U	0.017	0.279
99-87-6	4-Isopropyltoluene	0.279	U	0.015	0.279
108-10-1	4-Methyl-2-pentanone	0.279	U	0.019	0.279
67-64-1	Acetone	1.40	U	0.059	1.40
107-02-8	Acrolein	1.40	U	0.112	1.40
107-13-1	Acrylonitrile	1.40	U	0.060	1.40
71-43-2	Benzene	0.102	J	0.00765	0.279

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SC-W

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.85 (g/ml) g

Lab Sample ID: 21101140512

Level: (low/med) LOW

Lab File ID: 2110116/a8980

% Moisture: not dec. 23.5

Date Collected: 01/13/11

Time: 1645

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1715

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-86-1	Bromobenzene	0.279	U	0.017	0.279
75-27-4	Bromodichloromethane	0.279	U	0.00838	0.279
75-25-2	Bromoform	0.279	U	0.013	0.279
74-83-9	Bromomethane	0.279	U	0.082	0.279
75-15-0	Carbon disulfide	0.279	U	0.026	0.279
56-23-5	Carbon tetrachloride	0.279	U	0.013	0.279
108-90-7	Chlorobenzene	0.279	U	0.010	0.279
75-00-3	Chloroethane	0.279	U	0.037	0.279
67-66-3	Chloroform	0.279	U	0.014	0.279
74-87-3	Chloromethane	0.279	U	0.042	0.279
110-82-7	Cyclohexane	0.208	J	0.00983	0.279
124-48-1	Dibromochloromethane	0.279	U	0.00782	0.279
74-95-3	Dibromomethane	0.279	U	0.018	0.279
75-71-8	Dichlorodifluoromethane	0.279	U	0.00620	0.279
100-41-4	Ethylbenzene	0.144	J	0.012	0.279
87-68-3	Hexachlorobutadiene	0.279	U	0.013	0.279
98-82-8	Isopropylbenzene (Cumene)	0.328		0.011	0.279
79-20-9	Methyl Acetate	0.279	U	0.019	0.279
74-88-4	Methyl iodide	0.279	U	0.073	0.279
108-87-2	Methylcyclohexane	0.279	U	0.00916	0.279
75-09-2	Methylene chloride	0.558	U	0.019	0.558
91-20-3	Naphthalene	0.118	J	0.046	0.279
100-42-5	Styrene	0.279	U	0.015	0.279
127-18-4	Tetrachloroethene	0.279	U	0.012	0.279
108-88-3	Toluene	0.279	U	0.011	0.279
79-01-6	Trichloroethene	0.279	U	0.013	0.279
75-69-4	Trichlorofluoromethane	0.279	U	0.00748	0.279
76-13-1	Trichlorotrifluoroethane	0.279	U	0.064	0.279
108-05-4	Vinyl acetate	0.279	U	0.012	0.279
75-01-4	Vinyl chloride	0.279	U	0.00754	0.279
1330-20-7	Xylene (total)	0.226	J	0.038	0.558
156-59-2	cis-1,2-Dichloroethene	0.279	U	0.00960	0.279

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SC-W

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5.85 (g/ml) g Lab Sample ID: 21101140512

Level: (low/med) LOW Lab File ID: 2110116/a8980

% Moisture: not dec. 23.5 Date Collected: 01/13/11 Time: 1645

GC Column: RTX-VMS-30 ID: .25 (mm) Date Received: 01/14/11

Instrument ID: MSV11 Date Analyzed: 01/16/11 Time: 1715

Soil Extract Volume: \_\_\_\_\_ (µL) Dilution Factor: 50 Analyst: RJU

Soil Aliquot Volume: \_\_\_\_\_ (µL) Prep Batch: \_\_\_\_\_ Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-01-5	cis-1,3-Dichloropropene	0.279	U	0.00810	0.279
136777-61-	m,p-Xylene	0.117	J	0.028	0.279
71-36-3	n-Butyl alcohol	1.40	U	1.02	1.40
104-51-8	n-Butylbenzene	0.279	U	0.019	0.279
103-65-1	n-Propylbenzene	0.279	U	0.015	0.279
95-47-6	o-Xylene	0.109	J	0.011	0.279
135-98-8	sec-Butylbenzene	0.279	U	0.014	0.279
1634-04-4	tert-Butyl methyl ether (MTBE)	0.279	U	0.00932	0.279
98-06-6	tert-Butylbenzene	0.279	U	0.013	0.279
156-60-5	trans-1,2-Dichloroethene	0.279	U	0.011	0.279
10061-02-6	trans-1,3-Dichloropropene	0.279	U	0.012	0.279
110-57-6	trans-1,4-Dichloro-2-butene	0.279	U	0.032	0.279

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SC-E

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 4.93 (g/ml) g

Lab Sample ID: 21101140513

Level: (low/med) LOW

Lab File ID: 2110116/a8981

% Moisture: not dec. 26.3

Date Collected: 01/13/11

Time: 1655

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1739

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

**CAS NO. COMPOUND RESULT Q MDL RL**

630-20-6	1,1,1,2-Tetrachloroethane	0.344	U	0.00722	0.344
71-55-6	1,1,1-Trichloroethane	0.344	U	0.016	0.344
79-34-5	1,1,2,2-Tetrachloroethane	0.344	U	0.019	0.344
79-00-5	1,1,2-Trichloroethane	0.344	U	0.016	0.344
75-34-3	1,1-Dichloroethane	0.344	U	0.023	0.344
75-35-4	1,1-Dichloroethene	0.344	U	0.046	0.344
563-58-6	1,1-Dichloropropene	0.344	U	0.014	0.344
96-18-4	1,2,3-Trichloropropane	0.138	U	0.024	0.138
120-82-1	1,2,4-Trichlorobenzene	0.344	U	0.021	0.344
95-63-6	1,2,4-Trimethylbenzene	0.074	J	0.020	0.344
96-12-8	1,2-Dibromo-3-chloropropane	0.344	U	0.055	0.344
106-93-4	1,2-Dibromoethane	0.344	U	0.016	0.344
95-50-1	1,2-Dichlorobenzene	0.344	U	0.022	0.344
107-06-2	1,2-Dichloroethane	0.344	U	0.00901	0.344
78-87-5	1,2-Dichloropropane	0.344	U	0.00743	0.344
108-67-8	1,3,5-Trimethylbenzene	0.344	U	0.017	0.344
541-73-1	1,3-Dichlorobenzene	0.344	U	0.022	0.344
142-28-9	1,3-Dichloropropane	0.344	U	0.012	0.344
106-46-7	1,4-Dichlorobenzene	0.344	U	0.028	0.344
594-20-7	2,2-Dichloropropane	0.344	U	0.080	0.344
78-93-3	2-Butanone	0.344	U	0.041	0.344
110-75-8	2-Chloroethylvinyl ether	0.344	U	0.016	0.344
95-49-8	2-Chlorotoluene	0.344	U	0.018	0.344
591-78-6	2-Hexanone	0.344	U	0.023	0.344
106-43-4	4-Chlorotoluene	0.344	U	0.021	0.344
99-87-6	4-Isopropyltoluene	0.344	U	0.018	0.344
108-10-1	4-Methyl-2-pentanone	0.344	U	0.023	0.344
67-64-1	Acetone	1.72	U	0.073	1.72
107-02-8	Acrolein	1.72	U	0.138	1.72
107-13-1	Acrylonitrile	1.72	U	0.074	1.72
71-43-2	Benzene	0.344	U	0.00942	0.344

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SC-E

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 4.93 (g/ml) g

Lab Sample ID: 21101140513

Level: (low/med) LOW

Lab File ID: 2110116/a8981

% Moisture: not dec. 26.3

Date Collected: 01/13/11

Time: 1655

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1739

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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108-86-1	Bromobenzene	0.344	U	0.021	0.344
75-27-4	Bromodichloromethane	0.344	U	0.010	0.344
75-25-2	Bromoform	0.344	U	0.016	0.344
74-83-9	Bromomethane	0.344	U	0.100	0.344
75-15-0	Carbon disulfide	0.344	U	0.032	0.344
56-23-5	Carbon tetrachloride	0.344	U	0.016	0.344
108-90-7	Chlorobenzene	0.344	U	0.013	0.344
75-00-3	Chloroethane	0.344	U	0.045	0.344
67-66-3	Chloroform	0.344	U	0.017	0.344
74-87-3	Chloromethane	0.344	U	0.052	0.344
110-82-7	Cyclohexane	0.106	J	0.012	0.344
124-48-1	Dibromochloromethane	0.344	U	0.00963	0.344
74-95-3	Dibromomethane	0.344	U	0.022	0.344
75-71-8	Dichlorodifluoromethane	0.344	U	0.00763	0.344
100-41-4	Ethylbenzene	0.195	J	0.014	0.344
87-68-3	Hexachlorobutadiene	0.344	U	0.016	0.344
98-82-8	Isopropylbenzene (Cumene)	0.427		0.013	0.344
79-20-9	Methyl Acetate	0.344	U	0.024	0.344
74-88-4	Methyl iodide	0.344	U	0.090	0.344
108-87-2	Methylcyclohexane	0.344	U	0.011	0.344
75-09-2	Methylene chloride	0.688	U	0.024	0.688
91-20-3	Naphthalene	0.164	J	0.057	0.344
100-42-5	Styrene	0.344	U	0.018	0.344
127-18-4	Tetrachloroethene	0.344	U	0.014	0.344
108-88-3	Toluene	0.344	U	0.014	0.344
79-01-6	Trichloroethene	0.344	U	0.016	0.344
75-69-4	Trichlorofluoromethane	0.344	U	0.00922	0.344
76-13-1	Trichlorotrifluoroethane	0.344	U	0.079	0.344
108-05-4	Vinyl acetate	0.344	U	0.015	0.344
75-01-4	Vinyl chloride	0.344	U	0.00928	0.344
1330-20-7	Xylene (total)	0.187	J	0.047	0.688
156-59-2	cis-1,2-Dichloroethene	0.344	U	0.012	0.344

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SC-E

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 4.93 (g/ml) g

Lab Sample ID: 21101140513

Level: (low/med) LOW

Lab File ID: 2110116/a8981

% Moisture: not dec. 26.3

Date Collected: 01/13/11

Time: 1655

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1739

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

**CAS NO. COMPOUND RESULT Q MDL RL**

10061-01-5	cis-1,3-Dichloropropene	0.344	U	0.00997	0.344
136777-61-	m,p-Xylene	0.100	J	0.035	0.344
71-36-3	n-Butyl alcohol	1.72	U	1.26	1.72
104-51-8	n-Butylbenzene	0.344	U	0.024	0.344
103-65-1	n-Propylbenzene	0.344	U	0.019	0.344
95-47-6	o-Xylene	0.087	J	0.013	0.344
135-98-8	sec-Butylbenzene	0.344	U	0.017	0.344
1634-04-4	tert-Butyl methyl ether (MTBE)	0.344	U	0.011	0.344
98-06-6	tert-Butylbenzene	0.344	U	0.016	0.344
156-60-5	trans-1,2-Dichloroethene	0.344	U	0.014	0.344
10061-02-6	trans-1,3-Dichloropropene	0.344	U	0.015	0.344
110-57-6	trans-1,4-Dichloro-2-butene	0.344	U	0.039	0.344

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EQUIPMENT BLANK

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL Lab Sample ID: 21101140514

Level: (low/med) LOW Lab File ID: 2110116/a8966

% Moisture: not dec. \_\_\_\_\_ Date Collected: 01/13/11 Time: 1710

GC Column: RTX-VMS-30 ID: .25 (mm) Date Received: 01/14/11

Instrument ID: MSV11 Date Analyzed: 01/16/11 Time: 1142

Soil Extract Volume: \_\_\_\_\_ (µL) Dilution Factor: 1 Analyst: RJU

Soil Aliquot Volume: \_\_\_\_\_ (µL) Prep Batch: \_\_\_\_\_ Analytical Batch: 449012

Analytical Method: SW-846 8260

CONCENTRATION UNITS: mg/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.00500	U	0.000113	0.00500
71-55-6	1,1,1-Trichloroethane	0.00500	U	0.000106	0.00500
79-34-5	1,1,2,2-Tetrachloroethane	0.00500	U	0.000072	0.00500
79-00-5	1,1,2-Trichloroethane	0.00500	U	0.000095	0.00500
75-34-3	1,1-Dichloroethane	0.00500	U	0.000030	0.00500
75-35-4	1,1-Dichloroethene	0.00500	U	0.000164	0.00500
563-58-6	1,1-Dichloropropene	0.00500	U	0.000067	0.00500
96-18-4	1,2,3-Trichloropropane	0.00500	U	0.000100	0.00500
120-82-1	1,2,4-Trichlorobenzene	0.00500	U	0.000119	0.00500
95-63-6	1,2,4-Trimethylbenzene	0.00500	U	0.000027	0.00500
96-12-8	1,2-Dibromo-3-chloropropane	0.00500	U	0.000082	0.00500
106-93-4	1,2-Dibromoethane	0.00500	U	0.000046	0.00500
95-50-1	1,2-Dichlorobenzene	0.00500	U	0.000078	0.00500
107-06-2	1,2-Dichloroethane	0.00500	U	0.000086	0.00500
78-87-5	1,2-Dichloropropane	0.00500	U	0.000064	0.00500
108-67-8	1,3,5-Trimethylbenzene	0.00500	U	0.000021	0.00500
541-73-1	1,3-Dichlorobenzene	0.00500	U	0.000098	0.00500
142-28-9	1,3-Dichloropropane	0.00500	U	0.000041	0.00500
106-46-7	1,4-Dichlorobenzene	0.00500	U	0.000118	0.00500
594-20-7	2,2-Dichloropropane	0.00500	U	0.000117	0.00500
78-93-3	2-Butanone	0.00500	U	0.000093	0.00500
110-75-8	2-Chloroethylvinyl ether	0.00500	U	0.000515	0.00500
95-49-8	2-Chlorotoluene	0.00500	U	0.000044	0.00500
591-78-6	2-Hexanone	0.00500	U	0.000503	0.00500
106-43-4	4-Chlorotoluene	0.00500	U	0.000052	0.00500
99-87-6	4-Isopropyltoluene	0.00500	U	0.000037	0.00500
108-10-1	4-Methyl-2-pentanone	0.00500	U	0.000065	0.00500
67-64-1	Acetone	0.025	U	0.00115	0.025
107-02-8	Acrolein	0.025	U	0.00169	0.025
107-13-1	Acrylonitrile	0.025	U	0.00100	0.025
71-43-2	Benzene	0.00500	U	0.000054	0.00500

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EQUIPMENT BLANK

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 21101140514

Level: (low/med) LOW

Lab File ID: 2110116/a8966

% Moisture: not dec.

Date Collected: 01/13/11

Time: 1710

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1142

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449012

CONCENTRATION UNITS: mg/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-86-1	Bromobenzene	0.00500	U	0.000084	0.00500
75-27-4	Bromodichloromethane	0.00500	U	0.000053	0.00500
75-25-2	Bromoform	0.00500	U	0.000104	0.00500
74-83-9	Bromomethane	0.00500	U	0.000264	0.00500
75-15-0	Carbon disulfide	0.00500	U	0.000143	0.00500
56-23-5	Carbon tetrachloride	0.00500	U	0.000148	0.00500
108-90-7	Chlorobenzene	0.00500	U	0.000027	0.00500
75-00-3	Chloroethane	0.00500	U	0.000351	0.00500
67-66-3	Chloroform	0.00500	U	0.000056	0.00500
74-87-3	Chloromethane	0.00500	U	0.000088	0.00500
110-82-7	Cyclohexane	0.00500	U	0.000064	0.00500
124-48-1	Dibromochloromethane	0.00500	U	0.000040	0.00500
74-95-3	Dibromomethane	0.00500	U	0.000184	0.00500
75-71-8	Dichlorodifluoromethane	0.00500	U	0.000096	0.00500
100-41-4	Ethylbenzene	0.00500	U	0.000062	0.00500
87-68-3	Hexachlorobutadiene	0.00500	U	0.000690	0.00500
98-82-8	Isopropylbenzene (Cumene)	0.00500	U	0.000034	0.00500
79-20-9	Methyl Acetate	0.00500	U	0.00142	0.00500
74-88-4	Methyl iodide	0.00500	U	0.000243	0.00500
108-87-2	Methylcyclohexane	0.00500	U	0.000072	0.00500
75-09-2	Methylene chloride	0.010	U	0.000327	0.010
91-20-3	Naphthalene	0.00500	U	0.000081	0.00500
100-42-5	Styrene	0.00500	U	0.000050	0.00500
127-18-4	Tetrachloroethene	0.00500	U	0.000121	0.00500
108-88-3	Toluene	0.00500	U	0.000059	0.00500
79-01-6	Trichloroethene	0.00500	U	0.000061	0.00500
75-69-4	Trichlorofluoromethane	0.00500	U	0.000123	0.00500
76-13-1	Trichlorotrifluoroethane	0.00500	U	0.000127	0.00500
108-05-4	Vinyl acetate	0.00500	U	0.000202	0.00500
75-01-4	Vinyl chloride	0.00500	U	0.000093	0.00500
1330-20-7	Xylene (total)	0.010	U	0.000058	0.010
156-59-2	cis-1,2-Dichloroethene	0.00500	U	0.000061	0.00500

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

EQUIPMENT BLANK

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 21101140514

Level: (low/med) LOW

Lab File ID: 2110116/a8966

% Moisture: not dec.

Date Collected: 01/13/11

Time: 1710

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1142

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449012

CONCENTRATION UNITS: mg/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
10061-01-5	cis-1,3-Dichloropropene	0.00500	U	0.000031	0.00500
136777-61-	m,p-Xylene	0.010	U	0.000058	0.010
71-36-3	n-Butyl alcohol	0.025	U	0.000395	0.025
104-51-8	n-Butylbenzene	0.00500	U	0.000036	0.00500
103-65-1	n-Propylbenzene	0.00500	U	0.000054	0.00500
95-47-6	o-Xylene	0.00500	U	0.000027	0.00500
135-98-8	sec-Butylbenzene	0.00500	U	0.000026	0.00500
1634-04-4	tert-Butyl methyl ether (MTBE)	0.00500	U	0.000051	0.00500
98-06-6	tert-Butylbenzene	0.00500	U	0.000077	0.00500
156-60-5	trans-1,2-Dichloroethene	0.00500	U	0.000107	0.00500
10061-02-6	trans-1,3-Dichloropropene	0.00500	U	0.000054	0.00500
110-57-6	trans-1,4-Dichloro-2-butene	0.00500	U	0.000329	0.00500

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK 1

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 21101140515

Level: (low/med) LOW

Lab File ID: 2110116/a8967

% Moisture: not dec.

Date Collected: 01/13/11

Time: 1715

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1205

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449012

CONCENTRATION UNITS: mg/L

Analytical Method: SW-846 8260

**CAS NO. COMPOUND RESULT Q MDL RL**

630-20-6	1,1,1,2-Tetrachloroethane	0.00500	U	0.000113	0.00500
71-55-6	1,1,1-Trichloroethane	0.00500	U	0.000106	0.00500
79-34-5	1,1,2,2-Tetrachloroethane	0.00500	U	0.000072	0.00500
79-00-5	1,1,2-Trichloroethane	0.00500	U	0.000095	0.00500
75-34-3	1,1-Dichloroethane	0.00500	U	0.000030	0.00500
75-35-4	1,1-Dichloroethene	0.00500	U	0.000164	0.00500
563-58-6	1,1-Dichloropropene	0.00500	U	0.000067	0.00500
96-18-4	1,2,3-Trichloropropane	0.00500	U	0.000100	0.00500
120-82-1	1,2,4-Trichlorobenzene	0.00500	U	0.000119	0.00500
95-63-6	1,2,4-Trimethylbenzene	0.00500	U	0.000027	0.00500
96-12-8	1,2-Dibromo-3-chloropropane	0.00500	U	0.000082	0.00500
106-93-4	1,2-Dibromoethane	0.00500	U	0.000046	0.00500
95-50-1	1,2-Dichlorobenzene	0.00500	U	0.000078	0.00500
107-06-2	1,2-Dichloroethane	0.00500	U	0.000086	0.00500
78-87-5	1,2-Dichloropropane	0.00500	U	0.000064	0.00500
108-67-8	1,3,5-Trimethylbenzene	0.00500	U	0.000021	0.00500
541-73-1	1,3-Dichlorobenzene	0.00500	U	0.000098	0.00500
142-28-9	1,3-Dichloropropane	0.00500	U	0.000041	0.00500
106-46-7	1,4-Dichlorobenzene	0.00500	U	0.000118	0.00500
594-20-7	2,2-Dichloropropane	0.00500	U	0.000117	0.00500
78-93-3	2-Butanone	0.00500	U	0.000093	0.00500
110-75-8	2-Chloroethylvinyl ether	0.00500	U	0.000515	0.00500
95-49-8	2-Chlorotoluene	0.00500	U	0.000044	0.00500
591-78-6	2-Hexanone	0.00500	U	0.000503	0.00500
106-43-4	4-Chlorotoluene	0.00500	U	0.000052	0.00500
99-87-6	4-Isopropyltoluene	0.00500	U	0.000037	0.00500
108-10-1	4-Methyl-2-pentanone	0.00500	U	0.000065	0.00500
67-64-1	Acetone	0.025	U	0.00115	0.025
107-02-8	Acrolein	0.025	U	0.00169	0.025
107-13-1	Acrylonitrile	0.025	U	0.00100	0.025
71-43-2	Benzene	0.00500	U	0.000054	0.00500

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK 1

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 21101140515

Level: (low/med) LOW

Lab File ID: 2110116/a8967

% Moisture: not dec.

Date Collected: 01/13/11

Time: 1715

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1205

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449012

CONCENTRATION UNITS: mg/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-86-1	Bromobenzene	0.00500	U	0.000084	0.00500
75-27-4	Bromodichloromethane	0.00500	U	0.000053	0.00500
75-25-2	Bromoform	0.00500	U	0.000104	0.00500
74-83-9	Bromomethane	0.00500	U	0.000264	0.00500
75-15-0	Carbon disulfide	0.00500	U	0.000143	0.00500
56-23-5	Carbon tetrachloride	0.00500	U	0.000148	0.00500
108-90-7	Chlorobenzene	0.00500	U	0.000027	0.00500
75-00-3	Chloroethane	0.00500	U	0.000351	0.00500
67-66-3	Chloroform	0.00500	U	0.000056	0.00500
74-87-3	Chloromethane	0.00500	U	0.000088	0.00500
110-82-7	Cyclohexane	0.00500	U	0.000064	0.00500
124-48-1	Dibromochloromethane	0.00500	U	0.000040	0.00500
74-95-3	Dibromomethane	0.00500	U	0.000184	0.00500
75-71-8	Dichlorodifluoromethane	0.00500	U	0.000096	0.00500
100-41-4	Ethylbenzene	0.00500	U	0.000062	0.00500
87-68-3	Hexachlorobutadiene	0.00500	U	0.000690	0.00500
98-82-8	Isopropylbenzene (Cumene)	0.00500	U	0.000034	0.00500
79-20-9	Methyl Acetate	0.00500	U	0.00142	0.00500
74-88-4	Methyl iodide	0.00500	U	0.000243	0.00500
108-87-2	Methylcyclohexane	0.00500	U	0.000072	0.00500
75-09-2	Methylene chloride	0.010	U	0.000327	0.010
91-20-3	Naphthalene	0.00500	U	0.000081	0.00500
100-42-5	Styrene	0.00500	U	0.000050	0.00500
127-18-4	Tetrachloroethene	0.00500	U	0.000121	0.00500
108-88-3	Toluene	0.00500	U	0.000059	0.00500
79-01-6	Trichloroethene	0.00500	U	0.000061	0.00500
75-69-4	Trichlorofluoromethane	0.00500	U	0.000123	0.00500
76-13-1	Trichlorotrifluoroethane	0.00500	U	0.000127	0.00500
108-05-4	Vinyl acetate	0.00500	U	0.000202	0.00500
75-01-4	Vinyl chloride	0.00500	U	0.000093	0.00500
1330-20-7	Xylene (total)	0.010	U	0.000058	0.010
156-59-2	cis-1,2-Dichloroethene	0.00500	U	0.000061	0.00500

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK 1

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 21101140515

Level: (low/med) LOW

Lab File ID: 2110116/a8967

% Moisture: not dec.

Date Collected: 01/13/11

Time: 1715

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1205

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449012

CONCENTRATION UNITS: mg/L

Analytical Method: SW-846 8260

CAS NO. COMPOUND RESULT Q MDL RL

10061-01-5	cis-1,3-Dichloropropene	0.00500	U	0.000031	0.00500
136777-61-	m,p-Xylene	0.010	U	0.000058	0.010
71-36-3	n-Butyl alcohol	0.025	U	0.000395	0.025
104-51-8	n-Butylbenzene	0.00500	U	0.000036	0.00500
103-65-1	n-Propylbenzene	0.00500	U	0.000054	0.00500
95-47-6	o-Xylene	0.00500	U	0.000027	0.00500
135-98-8	sec-Butylbenzene	0.00500	U	0.000026	0.00500
1634-04-4	tert-Butyl methyl ether (MTBE)	0.00500	U	0.000051	0.00500
98-06-6	tert-Butylbenzene	0.00500	U	0.000077	0.00500
156-60-5	trans-1,2-Dichloroethene	0.00500	U	0.000107	0.00500
10061-02-6	trans-1,3-Dichloropropene	0.00500	U	0.000054	0.00500
110-57-6	trans-1,4-Dichloro-2-butene	0.00500	U	0.000329	0.00500

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK 2

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL Lab Sample ID: 21101140516

Level: (low/med) LOW Lab File ID: 2110116/a8968

% Moisture: not dec. Date Collected: 01/13/11 Time: 1720

GC Column: RTX-VMS-30 ID: .25 (mm) Date Received: 01/14/11

Instrument ID: MSV11 Date Analyzed: 01/16/11 Time: 1228

Soil Extract Volume: \_\_\_\_\_ (µL) Dilution Factor: 1 Analyst: RJU

Soil Aliquot Volume: \_\_\_\_\_ (µL) Prep Batch: \_\_\_\_\_ Analytical Batch: 449012

Analytical Method: SW-846 8260

CONCENTRATION UNITS: mg/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
630-20-6	1,1,1,2-Tetrachloroethane	0.00500	U	0.000113	0.00500
71-55-6	1,1,1-Trichloroethane	0.00500	U	0.000106	0.00500
79-34-5	1,1,2,2-Tetrachloroethane	0.00500	U	0.000072	0.00500
79-00-5	1,1,2-Trichloroethane	0.00500	U	0.000095	0.00500
75-34-3	1,1-Dichloroethane	0.00500	U	0.000030	0.00500
75-35-4	1,1-Dichloroethene	0.00500	U	0.000164	0.00500
563-58-6	1,1-Dichloropropene	0.00500	U	0.000067	0.00500
96-18-4	1,2,3-Trichloropropane	0.00500	U	0.000100	0.00500
120-82-1	1,2,4-Trichlorobenzene	0.00500	U	0.000119	0.00500
95-63-6	1,2,4-Trimethylbenzene	0.00500	U	0.000027	0.00500
96-12-8	1,2-Dibromo-3-chloropropane	0.00500	U	0.000082	0.00500
106-93-4	1,2-Dibromoethane	0.00500	U	0.000046	0.00500
95-50-1	1,2-Dichlorobenzene	0.00500	U	0.000078	0.00500
107-06-2	1,2-Dichloroethane	0.00500	U	0.000086	0.00500
78-87-5	1,2-Dichloropropane	0.00500	U	0.000064	0.00500
108-67-8	1,3,5-Trimethylbenzene	0.00500	U	0.000021	0.00500
541-73-1	1,3-Dichlorobenzene	0.00500	U	0.000098	0.00500
142-28-9	1,3-Dichloropropane	0.00500	U	0.000041	0.00500
106-46-7	1,4-Dichlorobenzene	0.00500	U	0.000118	0.00500
594-20-7	2,2-Dichloropropane	0.00500	U	0.000117	0.00500
78-93-3	2-Butanone	0.00500	U	0.000093	0.00500
110-75-8	2-Chloroethylvinyl ether	0.00500	U	0.000515	0.00500
95-49-8	2-Chlorotoluene	0.00500	U	0.000044	0.00500
591-78-6	2-Hexanone	0.00500	U	0.000503	0.00500
106-43-4	4-Chlorotoluene	0.00500	U	0.000052	0.00500
99-87-6	4-Isopropyltoluene	0.00500	U	0.000037	0.00500
108-10-1	4-Methyl-2-pentanone	0.00500	U	0.000065	0.00500
67-64-1	Acetone	0.025	U	0.00115	0.025
107-02-8	Acrolein	0.025	U	0.00169	0.025
107-13-1	Acrylonitrile	0.025	U	0.00100	0.025
71-43-2	Benzene	0.00500	U	0.000054	0.00500

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK 2

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL Lab Sample ID: 21101140516

Level: (low/med) LOW Lab File ID: 2110116/a8968

% Moisture: not dec. \_\_\_\_\_ Date Collected: 01/13/11 Time: 1720

GC Column: RTX-VMS-30 ID: .25 (mm) Date Received: 01/14/11

Instrument ID: MSV11 Date Analyzed: 01/16/11 Time: 1228

Soil Extract Volume: \_\_\_\_\_ (µL) Dilution Factor: 1 Analyst: RJU

Soil Aliquot Volume: \_\_\_\_\_ (µL) Prep Batch: \_\_\_\_\_ Analytical Batch: 449012

Analytical Method: SW-846 8260

CONCENTRATION UNITS: mg/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
108-86-1	Bromobenzene	0.00500	U	0.000084	0.00500
75-27-4	Bromodichloromethane	0.00500	U	0.000053	0.00500
75-25-2	Bromoform	0.00500	U	0.000104	0.00500
74-83-9	Bromomethane	0.00500	U	0.000264	0.00500
75-15-0	Carbon disulfide	0.00500	U	0.000143	0.00500
56-23-5	Carbon tetrachloride	0.00500	U	0.000148	0.00500
108-90-7	Chlorobenzene	0.00500	U	0.000027	0.00500
75-00-3	Chloroethane	0.00500	U	0.000351	0.00500
67-66-3	Chloroform	0.00500	U	0.000056	0.00500
74-87-3	Chloromethane	0.00500	U	0.000088	0.00500
110-82-7	Cyclohexane	0.00500	U	0.000064	0.00500
124-48-1	Dibromochloromethane	0.00500	U	0.000040	0.00500
74-95-3	Dibromomethane	0.00500	U	0.000184	0.00500
75-71-8	Dichlorodifluoromethane	0.00500	U	0.000096	0.00500
100-41-4	Ethylbenzene	0.00500	U	0.000062	0.00500
87-68-3	Hexachlorobutadiene	0.00500	U	0.000690	0.00500
98-82-8	Isopropylbenzene (Cumene)	0.00500	U	0.000034	0.00500
79-20-9	Methyl Acetate	0.00500	U	0.00142	0.00500
74-88-4	Methyl iodide	0.00500	U	0.000243	0.00500
108-87-2	Methylcyclohexane	0.00500	U	0.000072	0.00500
75-09-2	Methylene chloride	0.010	U	0.000327	0.010
91-20-3	Naphthalene	0.00500	U	0.000081	0.00500
100-42-5	Styrene	0.00500	U	0.000050	0.00500
127-18-4	Tetrachloroethene	0.00500	U	0.000121	0.00500
108-88-3	Toluene	0.00500	U	0.000059	0.00500
79-01-6	Trichloroethene	0.00500	U	0.000061	0.00500
75-69-4	Trichlorofluoromethane	0.00500	U	0.000123	0.00500
76-13-1	Trichlorotrifluoroethane	0.00500	U	0.000127	0.00500
108-05-4	Vinyl acetate	0.00500	U	0.000202	0.00500
75-01-4	Vinyl chloride	0.00500	U	0.000093	0.00500
1330-20-7	Xylene (total)	0.010	U	0.000058	0.010
156-59-2	cis-1,2-Dichloroethene	0.00500	U	0.000061	0.00500

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIP BLANK 2

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 21101140516

Level: (low/med) LOW

Lab File ID: 2110116/a8968

% Moisture: not dec.

Date Collected: 01/13/11

Time: 1720

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received: 01/14/11

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1228

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449012

Analytical Method: SW-846 8260

CONCENTRATION UNITS: mg/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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10061-01-5	cis-1,3-Dichloropropene	0.00500	U	0.000031	0.00500
136777-61-	m,p-Xylene	0.010	U	0.000058	0.010
71-36-3	n-Butyl alcohol	0.025	U	0.000395	0.025
104-51-8	n-Butylbenzene	0.00500	U	0.000036	0.00500
103-65-1	n-Propylbenzene	0.00500	U	0.000054	0.00500
95-47-6	o-Xylene	0.00500	U	0.000027	0.00500
135-98-8	sec-Butylbenzene	0.00500	U	0.000026	0.00500
1634-04-4	tert-Butyl methyl ether (MTBE)	0.00500	U	0.000051	0.00500
98-06-6	tert-Butylbenzene	0.00500	U	0.000077	0.00500
156-60-5	trans-1,2-Dichloroethene	0.00500	U	0.000107	0.00500
10061-02-6	trans-1,3-Dichloropropene	0.00500	U	0.000054	0.00500
110-57-6	trans-1,4-Dichloro-2-butene	0.00500	U	0.000329	0.00500

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB913048

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 913048

Level: (low/med) LOW

Lab File ID: 2110116/a8963

% Moisture: not dec.

Date Collected:

Time:

GC Column: RTX-VMS-30

ID: .25

(mm)

Date Received:

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1033

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449012

CONCENTRATION UNITS: mg/L

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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67-64-1	Acetone	0.025	U	0.00115	0.025
107-02-8	Acrolein	0.025	U	0.00169	0.025
107-13-1	Acrylonitrile	0.025	U	0.00100	0.025
75-27-4	Bromodichloromethane	0.00500	U	0.000053	0.00500
75-25-2	Bromoform	0.00500	U	0.000104	0.00500
74-83-9	Bromomethane	0.00500	U	0.000264	0.00500
75-15-0	Carbon disulfide	0.00500	U	0.000143	0.00500
56-23-5	Carbon tetrachloride	0.00500	U	0.000148	0.00500
75-00-3	Chloroethane	0.00500	U	0.000351	0.00500
136777-61-	m,p-Xylene	0.010	U	0.000058	0.010
67-66-3	Chloroform	0.00500	U	0.000056	0.00500
74-87-3	Chloromethane	0.00500	U	0.000088	0.00500
124-48-1	Dibromochloromethane	0.00500	U	0.000040	0.00500
74-95-3	Dibromomethane	0.00500	U	0.000184	0.00500
75-71-8	Dichlorodifluoromethane	0.00500	U	0.000096	0.00500
75-34-3	1,1-Dichloroethane	0.00500	U	0.000030	0.00500
107-06-2	1,2-Dichloroethane	0.00500	U	0.000086	0.00500
156-59-2	cis-1,2-Dichloroethene	0.00500	U	0.000061	0.00500
156-60-5	trans-1,2-Dichloroethene	0.00500	U	0.000107	0.00500
75-09-2	Methylene chloride	0.010	U	0.000327	0.010
78-87-5	1,2-Dichloropropane	0.00500	U	0.000064	0.00500
10061-01-5	cis-1,3-Dichloropropene	0.00500	U	0.000031	0.00500
10061-02-6	trans-1,3-Dichloropropene	0.00500	U	0.000054	0.00500
100-41-4	Ethylbenzene	0.00500	U	0.000062	0.00500
591-78-6	2-Hexanone	0.00500	U	0.000503	0.00500
98-82-8	Isopropylbenzene (Cumene)	0.00500	U	0.000034	0.00500
78-93-3	2-Butanone	0.00500	U	0.000093	0.00500
74-88-4	Methyl iodide	0.00500	U	0.000243	0.00500
108-10-1	4-Methyl-2-pentanone	0.00500	U	0.000065	0.00500
103-65-1	n-Propylbenzene	0.00500	U	0.000054	0.00500
100-42-5	Styrene	0.00500	U	0.000050	0.00500

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB913048

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 913048

Level: (low/med) LOW

Lab File ID: 2110116/a8963

% Moisture: not dec.

Date Collected:

Time:

GC Column: RTX-VMS-30 ID: 25 (mm)

Date Received:

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1033

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449012

Analytical Method: SW-846 8260

CONCENTRATION UNITS: mg/L

**CAS NO. COMPOUND RESULT Q MDL RL**

127-18-4	Tetrachloroethene	0.00500	U	0.000121	0.00500
630-20-6	1,1,1,2-Tetrachloroethane	0.00500	U	0.000113	0.00500
79-34-5	1,1,2,2-Tetrachloroethane	0.00500	U	0.000072	0.00500
120-82-1	1,2,4-Trichlorobenzene	0.00500	U	0.000119	0.00500
71-55-6	1,1,1-Trichloroethane	0.00500	U	0.000106	0.00500
79-00-5	1,1,2-Trichloroethane	0.00500	U	0.000095	0.00500
75-69-4	Trichlorofluoromethane	0.00500	U	0.000123	0.00500
96-18-4	1,2,3-Trichloropropane	0.00500	U	0.000100	0.00500
95-63-6	1,2,4-Trimethylbenzene	0.00500	U	0.000027	0.00500
108-67-8	1,3,5-Trimethylbenzene	0.00500	U	0.000021	0.00500
75-01-4	Vinyl chloride	0.00500	U	0.000093	0.00500
95-47-6	o-Xylene	0.00500	U	0.000027	0.00500
96-12-8	1,2-Dibromo-3-chloropropane	0.00500	U	0.000082	0.00500
106-93-4	1,2-Dibromoethane	0.00500	U	0.000046	0.00500
108-05-4	Vinyl acetate	0.00500	U	0.000202	0.00500
1634-04-4	tert-Butyl methyl ether (MTBE)	0.00500	U	0.000051	0.00500
99-87-6	4-Isopropyltoluene	0.00500	U	0.000037	0.00500
1330-20-7	Xylene (total)	0.010	U	0.000058	0.010
108-87-2	Methylcyclohexane	0.00500	U	0.000072	0.00500
110-57-6	trans-1,4-Dichloro-2-butene	0.00500	U	0.000329	0.00500
110-82-7	Cyclohexane	0.00500	U	0.000064	0.00500
594-20-7	2,2-Dichloropropane	0.00500	U	0.000117	0.00500
79-20-9	Methyl Acetate	0.00500	U	0.00142	0.00500
76-13-1	Trichlorotrifluoroethane	0.00500	U	0.000127	0.00500
563-58-6	1,1-Dichloropropene	0.00500	U	0.000067	0.00500
110-75-8	2-Chloroethylvinyl ether	0.00500	U	0.000515	0.00500
142-28-9	1,3-Dichloropropane	0.00500	U	0.000041	0.00500
108-86-1	Bromobenzene	0.00500	U	0.000084	0.00500
95-49-8	2-Chlorotoluene	0.00500	U	0.000044	0.00500
106-43-4	4-Chlorotoluene	0.00500	U	0.000052	0.00500
98-06-6	tert-Butylbenzene	0.00500	U	0.000077	0.00500
135-98-8	sec-Butylbenzene	0.00500	U	0.000026	0.00500

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB913048

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Water

Sample wt/vol: 5 (g/ml) mL

Lab Sample ID: 913048

Level: (low/med) LOW

Lab File ID: 2110116/a8963

% Moisture: not dec.

Date Collected:

Time:

GC Column: RTX-VMS-30

ID: .25

(mm)

Date Received:

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1033

Soil Extract Volume: (µL)

Dilution Factor: 1

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449012

Analytical Method: SW-846 8260

CONCENTRATION UNITS: mg/L

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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541-73-1	1,3-Dichlorobenzene	0.00500	U	0.000098	0.00500
106-46-7	1,4-Dichlorobenzene	0.00500	U	0.000118	0.00500
104-51-8	n-Butylbenzene	0.00500	U	0.000036	0.00500
95-50-1	1,2-Dichlorobenzene	0.00500	U	0.000078	0.00500
87-68-3	Hexachlorobutadiene	0.00500	U	0.000690	0.00500
91-20-3	Naphthalene	0.00500	U	0.000081	0.00500
71-36-3	n-Butyl alcohol	0.025	U	0.000395	0.025
75-35-4	1,1-Dichloroethene	0.00500	U	0.000164	0.00500
71-43-2	Benzene	0.00500	U	0.000054	0.00500
79-01-6	Trichloroethene	0.00500	U	0.000061	0.00500
108-88-3	Toluene	0.00500	U	0.000059	0.00500
108-90-7	Chlorobenzene	0.00500	U	0.000027	0.00500

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB913051

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5 (g/ml) g

Lab Sample ID: 913051

Level: (low/med) LOW

Lab File ID: 2110116/a8964

% Moisture: not dec.

Date Collected:

Time:

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received:

Instrument ID: MSV11

Date Analyzed: 01/16/11

Time: 1055

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: RJU

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

**CAS NO. COMPOUND RESULT Q MDL RL**

67-64-1	Acetone	1.25	U	0.053	1.25
107-02-8	Acrolein	1.25	U	0.100	1.25
107-13-1	Acrylonitrile	1.25	U	0.054	1.25
75-27-4	Bromodichloromethane	0.250	U	0.00750	0.250
75-25-2	Bromoform	0.250	U	0.012	0.250
74-83-9	Bromomethane	0.250	U	0.073	0.250
75-15-0	Carbon disulfide	0.250	U	0.023	0.250
56-23-5	Carbon tetrachloride	0.250	U	0.012	0.250
75-00-3	Chloroethane	0.250	U	0.033	0.250
136777-61-	m,p-Xylene	0.250	U	0.025	0.250
67-66-3	Chloroform	0.250	U	0.012	0.250
74-87-3	Chloromethane	0.250	U	0.038	0.250
124-48-1	Dibromochloromethane	0.250	U	0.00700	0.250
74-95-3	Dibromomethane	0.250	U	0.016	0.250
75-71-8	Dichlorodifluoromethane	0.250	U	0.00555	0.250
75-34-3	1,1-Dichloroethane	0.250	U	0.017	0.250
107-06-2	1,2-Dichloroethane	0.250	U	0.00655	0.250
156-59-2	cis-1,2-Dichloroethene	0.250	U	0.00860	0.250
156-60-5	trans-1,2-Dichloroethene	0.250	U	0.010	0.250
75-09-2	Methylene chloride	0.500	U	0.017	0.500
78-87-5	1,2-Dichloropropane	0.250	U	0.00540	0.250
10061-01-5	cis-1,3-Dichloropropene	0.250	U	0.00725	0.250
10061-02-6	trans-1,3-Dichloropropene	0.250	U	0.011	0.250
100-41-4	Ethylbenzene	0.250	U	0.010	0.250
591-78-6	2-Hexanone	0.250	U	0.017	0.250
98-82-8	Isopropylbenzene (Cumene)	0.250	U	0.00975	0.250
78-93-3	2-Butanone	0.250	U	0.030	0.250
74-88-4	Methyl iodide	0.250	U	0.066	0.250
108-10-1	4-Methyl-2-pentanone	0.250	U	0.017	0.250
103-65-1	n-Propylbenzene	0.250	U	0.014	0.250
100-42-5	Styrene	0.250	U	0.013	0.250

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB913051

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5 (g/ml) g Lab Sample ID: 913051

Level: (low/med) LOW Lab File ID: 2110116/a8964

% Moisture: not dec. \_\_\_\_\_ Date Collected: \_\_\_\_\_ Time: \_\_\_\_\_

GC Column: RTX-VMS-30 ID: .25 (mm) Date Received: \_\_\_\_\_

Instrument ID: MSV11 Date Analyzed: 01/16/11 Time: 1055

Soil Extract Volume: \_\_\_\_\_ (µL) Dilution Factor: 50 Analyst: RJU

Soil Aliquot Volume: \_\_\_\_\_ (µL) Prep Batch: \_\_\_\_\_ Analytical Batch: 449013

Analytical Method: SW-846 8260

CONCENTRATION UNITS: mg/kg

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
127-18-4	Tetrachloroethene	0.250	U	0.010	0.250
630-20-6	1,1,1,2-Tetrachloroethane	0.250	U	0.00525	0.250
79-34-5	1,1,2,2-Tetrachloroethane	0.250	U	0.014	0.250
120-82-1	1,2,4-Trichlorobenzene	0.250	U	0.015	0.250
71-55-6	1,1,1-Trichloroethane	0.250	U	0.012	0.250
79-00-5	1,1,2-Trichloroethane	0.250	U	0.012	0.250
75-69-4	Trichlorofluoromethane	0.250	U	0.00670	0.250
96-18-4	1,2,3-Trichloropropane	0.100	U	0.017	0.100
95-63-6	1,2,4-Trimethylbenzene	0.250	U	0.015	0.250
108-67-8	1,3,5-Trimethylbenzene	0.250	U	0.012	0.250
75-01-4	Vinyl chloride	0.250	U	0.00675	0.250
95-47-6	o-Xylene	0.250	U	0.00945	0.250
96-12-8	1,2-Dibromo-3-chloropropane	0.250	U	0.040	0.250
106-93-4	1,2-Dibromoethane	0.250	U	0.012	0.250
108-05-4	Vinyl acetate	0.250	U	0.011	0.250
1634-04-4	tert-Butyl methyl ether (MTBE)	0.250	U	0.00835	0.250
99-87-6	4-Isopropyltoluene	0.250	U	0.013	0.250
1330-20-7	Xylene (total)	0.500	U	0.034	0.500
108-87-2	Methylcyclohexane	0.250	U	0.00820	0.250
110-57-6	trans-1,4-Dichloro-2-butene	0.250	U	0.028	0.250
110-82-7	Cyclohexane	0.250	U	0.00880	0.250
594-20-7	2,2-Dichloropropane	0.250	U	0.058	0.250
79-20-9	Methyl Acetate	0.250	U	0.017	0.250
76-13-1	Trichlorotrifluoroethane	0.250	U	0.058	0.250
563-58-6	1,1-Dichloropropene	0.250	U	0.010	0.250
110-75-8	2-Chloroethylvinyl ether	0.250	U	0.012	0.250
142-28-9	1,3-Dichloropropane	0.250	U	0.00895	0.250
108-86-1	Bromobenzene	0.250	U	0.015	0.250
95-49-8	2-Chlorotoluene	0.250	U	0.013	0.250
106-43-4	4-Chlorotoluene	0.250	U	0.015	0.250
98-06-6	tert-Butylbenzene	0.250	U	0.012	0.250
135-98-8	sec-Butylbenzene	0.250	U	0.013	0.250

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB913051

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5 (g/ml) g Lab Sample ID: 913051

Level: (low/med) LOW Lab File ID: 2110116/a8964

% Moisture: not dec. \_\_\_\_\_ Date Collected: \_\_\_\_\_ Time: \_\_\_\_\_

GC Column: RTX-VMS-30 ID: .25 (mm) Date Received: \_\_\_\_\_

Instrument ID: MSV11 Date Analyzed: 01/16/11 Time: 1055

Soil Extract Volume: \_\_\_\_\_ (µL) Dilution Factor: 50 Analyst: RJU

Soil Aliquot Volume: \_\_\_\_\_ (µL) Prep Batch: \_\_\_\_\_ Analytical Batch: 449013

CONCENTRATION UNITS: mg/kg Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
541-73-1	1,3-Dichlorobenzene	0.250	U	0.016	0.250
106-46-7	1,4-Dichlorobenzene	0.250	U	0.021	0.250
104-51-8	n-Butylbenzene	0.250	U	0.017	0.250
95-50-1	1,2-Dichlorobenzene	0.250	U	0.016	0.250
87-68-3	Hexachlorobutadiene	0.250	U	0.012	0.250
91-20-3	Naphthalene	0.250	U	0.041	0.250
71-36-3	n-Butyl alcohol	1.25	U	0.915	1.25
75-35-4	1,1-Dichloroethene	0.250	U	0.033	0.250
71-43-2	Benzene	0.250	U	0.00685	0.250
79-01-6	Trichloroethene	0.250	U	0.012	0.250
108-88-3	Toluene	0.250	U	0.010	0.250
108-90-7	Chlorobenzene	0.250	U	0.00940	0.250

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB913705

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5 (g/ml) g

Lab Sample ID: 913705

Level: (low/med) LOW

Lab File ID: 2110118p/k9909

% Moisture: not dec.

Date Collected:

Time:

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received:

Instrument ID: MSV5

Date Analyzed: 01/18/11

Time: 1455

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449157

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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67-64-1	Acetone	1.25	U	0.053	1.25
107-02-8	Acrolein	1.25	U	0.100	1.25
107-13-1	Acrylonitrile	1.25	U	0.054	1.25
75-27-4	Bromodichloromethane	0.250	U	0.00750	0.250
75-25-2	Bromoform	0.250	U	0.012	0.250
74-83-9	Bromomethane	0.250	U	0.073	0.250
75-15-0	Carbon disulfide	0.250	U	0.023	0.250
56-23-5	Carbon tetrachloride	0.250	U	0.012	0.250
75-00-3	Chloroethane	0.250	U	0.033	0.250
136777-61-	m,p-Xylene	0.250	U	0.025	0.250
67-66-3	Chloroform	0.250	U	0.012	0.250
74-87-3	Chloromethane	0.250	U	0.038	0.250
124-48-1	Dibromochloromethane	0.250	U	0.00700	0.250
74-95-3	Dibromomethane	0.250	U	0.016	0.250
75-71-8	Dichlorodifluoromethane	0.250	U	0.00555	0.250
75-34-3	1,1-Dichloroethane	0.250	U	0.017	0.250
107-06-2	1,2-Dichloroethane	0.250	U	0.00655	0.250
156-59-2	cis-1,2-Dichloroethene	0.250	U	0.00860	0.250
156-60-5	trans-1,2-Dichloroethene	0.250	U	0.010	0.250
75-09-2	Methylene chloride	0.500	U	0.017	0.500
78-87-5	1,2-Dichloropropane	0.250	U	0.00540	0.250
10061-01-5	cis-1,3-Dichloropropene	0.250	U	0.00725	0.250
10061-02-6	trans-1,3-Dichloropropene	0.250	U	0.011	0.250
100-41-4	Ethylbenzene	0.250	U	0.010	0.250
591-78-6	2-Hexanone	0.250	U	0.017	0.250
98-82-8	Isopropylbenzene (Cumene)	0.250	U	0.00975	0.250
78-93-3	2-Butanone	0.250	U	0.030	0.250
74-88-4	Methyl iodide	0.250	U	0.066	0.250
108-10-1	4-Methyl-2-pentanone	0.250	U	0.017	0.250
103-65-1	n-Propylbenzene	0.250	U	0.014	0.250
100-42-5	Styrene	0.250	U	0.013	0.250

FORM I VOA

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB913705

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5 (g/ml) g

Lab Sample ID: 913705

Level: (low/med) LOW

Lab File ID: 2110118p/k9909

% Moisture: not dec.

Date Collected:

Time:

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received:

Instrument ID: MSV5

Date Analyzed: 01/18/11

Time: 1455

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449157

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
127-18-4	Tetrachloroethene	0.250	U	0.010	0.250
630-20-6	1,1,1,2-Tetrachloroethane	0.250	U	0.00525	0.250
79-34-5	1,1,2,2-Tetrachloroethane	0.250	U	0.014	0.250
120-82-1	1,2,4-Trichlorobenzene	0.250	U	0.015	0.250
71-55-6	1,1,1-Trichloroethane	0.250	U	0.012	0.250
79-00-5	1,1,2-Trichloroethane	0.250	U	0.012	0.250
75-69-4	Trichlorofluoromethane	0.250	U	0.00670	0.250
96-18-4	1,2,3-Trichloropropane	0.100	U	0.017	0.100
95-63-6	1,2,4-Trimethylbenzene	0.250	U	0.015	0.250
108-67-8	1,3,5-Trimethylbenzene	0.250	U	0.012	0.250
75-01-4	Vinyl chloride	0.250	U	0.00675	0.250
95-47-6	o-Xylene	0.250	U	0.00945	0.250
96-12-8	1,2-Dibromo-3-chloropropane	0.250	U	0.040	0.250
106-93-4	1,2-Dibromoethane	0.250	U	0.012	0.250
108-05-4	Vinyl acetate	0.250	U	0.011	0.250
1634-04-4	tert-Butyl methyl ether (MTBE)	0.250	U	0.00835	0.250
99-87-6	4-Isopropyltoluene	0.250	U	0.013	0.250
1330-20-7	Xylene (total)	0.500	U	0.034	0.500
108-87-2	Methylcyclohexane	0.250	U	0.00820	0.250
110-57-6	trans-1,4-Dichloro-2-butene	0.250	U	0.028	0.250
110-82-7	Cyclohexane	0.250	U	0.00880	0.250
594-20-7	2,2-Dichloropropane	0.250	U	0.058	0.250
79-20-9	Methyl Acetate	0.250	U	0.017	0.250
76-13-1	Trichlorotrifluoroethane	0.250	U	0.058	0.250
563-58-6	1,1-Dichloropropene	0.250	U	0.010	0.250
110-75-8	2-Chloroethylvinyl ether	0.250	U	0.012	0.250
142-28-9	1,3-Dichloropropane	0.250	U	0.00895	0.250
108-86-1	Bromobenzene	0.250	U	0.015	0.250
95-49-8	2-Chlorotoluene	0.250	U	0.013	0.250
106-43-4	4-Chlorotoluene	0.250	U	0.015	0.250
98-06-6	tert-Butylbenzene	0.250	U	0.012	0.250
135-98-8	sec-Butylbenzene	0.250	U	0.013	0.250

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MB913705

Lab Name: GCAL

Contract:

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Matrix: (soil/water) Solid

Sample wt/vol: 5 (g/ml) g

Lab Sample ID: 913705

Level: (low/med) LOW

Lab File ID: 2110118p/k9909

% Moisture: not dec.

Date Collected:

Time:

GC Column: RTX-VMS-30 ID: .25 (mm)

Date Received:

Instrument ID: MSV5

Date Analyzed: 01/18/11

Time: 1455

Soil Extract Volume: (µL)

Dilution Factor: 50

Analyst: CLH

Soil Aliquot Volume: (µL)

Prep Batch:

Analytical Batch: 449157

CONCENTRATION UNITS: mg/kg

Analytical Method: SW-846 8260

CAS NO.	COMPOUND	RESULT	Q	MDL	RL
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541-73-1	1,3-Dichlorobenzene	0.250	U	0.016	0.250
106-46-7	1,4-Dichlorobenzene	0.250	U	0.021	0.250
104-51-8	n-Butylbenzene	0.250	U	0.017	0.250
95-50-1	1,2-Dichlorobenzene	0.250	U	0.016	0.250
87-68-3	Hexachlorobutadiene	0.250	U	0.012	0.250
91-20-3	Naphthalene	0.250	U	0.041	0.250
71-36-3	n-Butyl alcohol	1.25	U	0.915	1.25
75-35-4	1,1-Dichloroethene	0.250	U	0.033	0.250
71-43-2	Benzene	0.250	U	0.00685	0.250
79-01-6	Trichloroethene	0.250	U	0.012	0.250
108-88-3	Toluene	0.250	U	0.010	0.250
108-90-7	Chlorobenzene	0.250	U	0.00940	0.250

## WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: GCAL

Contract: \_\_\_\_\_

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Method: SW-846 8260

	<b>SAMPLE NO.</b>	<b>SMC1</b>	<b>#</b>	<b>SMC2</b>	<b>#</b>	<b>SMC3</b>	<b>#</b>	<b>SMC4</b>	<b>#</b>	<b>TOT OUT</b>
1.	EQUIPMENT BLANK	97		99		102		96		0
2.	TRIP BLANK 1	96		99		100		94		0
3.	TRIP BLANK 2	95		98		100		95		0
4.	LCS913049	102		100		97		96		0
5.	LCSD913050	102		100		97		97		0
6.	MB913048	98		100		99		95		0

## QC LIMITS

SMC 1	4-Bromofluorobenzene	78	-	130
SMC 2	Dibromofluoromethane	77	-	127
SMC 3	Toluene-d8	76	-	134
SMC 4	1,2-Dichloroethane-d4	71	-	127

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

2B  
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Method: SW-846 8260

	<b>SAMPLE NO.</b>	<b>SMC1</b>	<b>#</b>	<b>SMC2</b>	<b>#</b>	<b>SMC3</b>	<b>#</b>	<b>SMC4</b>	<b>#</b>	<b>TOT OUT</b>
1.	T-15-F	106		98		98		93		0
2.	T-15-F MS	103		100		96		96		0
3.	T-15-F MSD	101		100		97		99		0
4.	T-21-F	104		97		98		97		0
5.	NC-0-0.3	106		95		97		96		0
6.	T-2-WEST	99		102		99		102		0
7.	T-6-FLOOR	102		97		99		97		0
8.	T-6-EAST	104		98		99		98		0
9.	T-6-SOUTH	100		98		99		96		0
10.	T-6-NORTH	105		97		96		97		0
11.	BLIND DUP	103		98		99		97		0
12.	SC-W	106		96		96		95		0
13.	SC-E	106		97		97		96		0
14.	LCS913052	102		100		97		96		0
15.	LCS913706	103		99		96		101		0
16.	LCSD913053	102		100		97		97		0
17.	LCSD913707	104		102		99		100		0
18.	MB913051	102		96		97		94		0
19.	MB913705	98		101		99		102		0

QC LIMITS

SMC 1	4-Bromofluorobenzene	62	-	127
SMC 2	Dibromofluoromethane	65	-	130
SMC 3	Toluene-d8	71	-	132
SMC 4	1,2-Dichloroethane-d4	62	-	125

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

3A  
WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Analytical Batch: 449012

SAMPLE NO. : **913049**

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS % REC	#	QC. LIMITS
1,1,1,2-Tetrachloroethane	mg/L	.05	0	.049	98		75 - 124
1,1,1-Trichloroethane	mg/L	.05	0	.046	93		76 - 126
1,1,2,2-Tetrachloroethane	mg/L	.05	0	.058	116		70 - 122
1,1,2-Trichloroethane	mg/L	.05	0	.047	94		72 - 121
1,1-Dichloroethane	mg/L	.05	0	.047	94		74 - 127
1,1-Dichloroethene	mg/L	.05	0	.046	93		69 - 129
1,1-Dichloropropene	mg/L	.05	0	.047	94		72 - 131
1,2,3-Trichloropropane	mg/L	.05	0	.05	100		70 - 120
1,2,4-Trichlorobenzene	mg/L	.05	0	.05	100		61 - 135
1,2,4-Trimethylbenzene	mg/L	.05	0	.048	97		74 - 125
1,2-Dibromo-3-chloropropane	mg/L	.05	0	.056	112		57 - 121
1,2-Dibromoethane	mg/L	.05	0	.047	94		70 - 124
1,2-Dichlorobenzene	mg/L	.05	0	.05	100		71 - 126
1,2-Dichloroethane	mg/L	.05	0	.047	93		71 - 129
1,2-Dichloropropane	mg/L	.05	0	.047	94		72 - 128
1,3,5-Trimethylbenzene	mg/L	.05	0	.049	97		71 - 132
1,3-Dichlorobenzene	mg/L	.05	0	.049	98		74 - 126
1,3-Dichloropropane	mg/L	.05	0	.047	94		74 - 122
1,4-Dichlorobenzene	mg/L	.05	0	.049	98		72 - 122
2,2-Dichloropropane	mg/L	.05	0	.047	95		77 - 124
2-Butanone	mg/L	.05	0	.056	112		58 - 137
2-Chloroethylvinyl ether	mg/L	.05	0	.042	84		56 - 124
2-Chlorotoluene	mg/L	.05	0	.049	99		72 - 127
2-Hexanone	mg/L	.05	0	.061	121		50 - 135
4-Chlorotoluene	mg/L	.05	0	.049	98		75 - 126
4-Isopropyltoluene	mg/L	.05	0	.048	96		71 - 129
4-Methyl-2-pentanone	mg/L	.05	0	.053	106		57 - 132
Acetone	mg/L	.05	0	.057	114		44 - 156
Acrolein	mg/L	.25	0	.311	124		30 - 160
Acrylonitrile	mg/L	.25	0	.258	103		64 - 137
Benzene	mg/L	.05	0	.047	93		70 - 129
Bromobenzene	mg/L	.05	0	.049	97		71 - 120
Bromodichloromethane	mg/L	.05	0	.047	95		74 - 125
Bromoform	mg/L	.05	0	.054	107		64 - 122
Bromomethane	mg/L	.05	0	.045	91		47 - 138

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 out of 74 outside limits

Spike Recovery: 0 out of 148 outside limits

FORM III VOA-1

3A  
WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Contract: \_\_\_\_\_

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Analytical Batch: 449012

Carbon disulfide	mg/L	.05	0	.045	91	69 - 136
Carbon tetrachloride	mg/L	.05	0	.047	94	76 - 128
Chlorobenzene	mg/L	.05	0	.049	98	74 - 123
Chloroethane	mg/L	.05	0	.047	94	62 - 141
Chloroform	mg/L	.05	0	.047	95	75 - 122
Chloromethane	mg/L	.05	0	.045	89	59 - 132
Cyclohexane	mg/L	.05	0	.048	97	69 - 132
Dibromochloromethane	mg/L	.05	0	.049	97	71 - 123
Dibromomethane	mg/L	.05	0	.047	93	72 - 129
Dichlorodifluoromethane	mg/L	.05	0	.044	88	58 - 140
Ethylbenzene	mg/L	.05	0	.048	95	74 - 126
Hexachlorobutadiene	mg/L	.05	0	.048	96	61 - 144
Isopropylbenzene (Cumene)	mg/L	.05	0	.048	96	71 - 125
Methyl Acetate	mg/L	.05	0	.052	103	57 - 139
Methyl iodide	mg/L	.05	0	.047	94	57 - 141
Methylcyclohexane	mg/L	.05	0	.047	95	67 - 138
Methylene chloride	mg/L	.05	0	.044	88	68 - 132
Naphthalene	mg/L	.05	0	.052	103	57 - 138
Styrene	mg/L	.05	0	.05	101	71 - 127
Tetrachloroethene	mg/L	.05	0	.047	94	68 - 128
Toluene	mg/L	.05	0	.048	97	72 - 120
Trichloroethene	mg/L	.05	0	.046	91	76 - 129
Trichlorofluoromethane	mg/L	.05	0	.046	93	72 - 136
Trichlorotrifluoroethane	mg/L	.05	0	.047	95	72 - 136
Vinyl acetate	mg/L	.05	0	.054	108	54 - 147
Vinyl chloride	mg/L	.05	0	.046	92	68 - 132
Xylene (total)	mg/L	.15	0	.143	95	74 - 127
cis-1,2-Dichloroethene	mg/L	.05	0	.047	93	73 - 130
cis-1,3-Dichloropropene	mg/L	.05	0	.048	96	71 - 132
m,p-Xylene	mg/L	.1	0	.096	96	74 - 126
n-Butylbenzene	mg/L	.05	0	.048	96	69 - 134
n-Propylbenzene	mg/L	.05	0	.049	97	75 - 129
o-Xylene	mg/L	.05	0	.048	95	73 - 130
sec-Butylbenzene	mg/L	.05	0	.049	97	70 - 136
tert-Butyl methyl ether (MTBE)	mg/L	.05	0	.047	95	71 - 125
tert-Butylbenzene	mg/L	.05	0	.048	96	72 - 126
trans-1,2-Dichloroethene	mg/L	.05	0	.046	92	69 - 132
trans-1,3-Dichloropropene	mg/L	.05	0	.048	96	71 - 131
trans-1,4-Dichloro-2-butene	mg/L	.05	0	.055	110	56 - 132

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 out of 74 outside limits

Spike Recovery: 0 out of 148 outside limits

FORM III VOA-1

3A  
WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Analytical Batch: 449012

SAMPLE NO. : 913050

COMPOUND	UNITS	SPIKE ADDED	LCSD CONC.	LCSD % REC	#	% RPD	#	QC. LIMITS REC	RPD
1,1,1,2-Tetrachloroethane	mg/L	.05	.046	92		6		75 - 124	0 - 30
1,1,1-Trichloroethane	mg/L	.05	.045	89		2		76 - 126	0 - 30
1,1,2,2-Tetrachloroethane	mg/L	.05	.049	98		17		70 - 122	0 - 30
1,1,2-Trichloroethane	mg/L	.05	.043	86		9		72 - 121	0 - 30
1,1-Dichloroethane	mg/L	.05	.044	88		7		74 - 127	0 - 30
1,1-Dichloroethene	mg/L	.05	.045	90		2		69 - 129	0 - 20
1,1-Dichloropropene	mg/L	.05	.045	90		4		72 - 131	0 - 30
1,2,3-Trichloropropane	mg/L	.05	.044	88		13		70 - 120	0 - 30
1,2,4-Trichlorobenzene	mg/L	.05	.045	90		11		61 - 135	0 - 30
1,2,4-Trimethylbenzene	mg/L	.05	.046	92		4		74 - 125	0 - 30
1,2-Dibromo-3-chloropropane	mg/L	.05	.046	92		20		57 - 121	0 - 30
1,2-Dibromoethane	mg/L	.05	.043	86		9		70 - 124	0 - 30
1,2-Dichlorobenzene	mg/L	.05	.047	93		6		71 - 126	0 - 30
1,2-Dichloroethane	mg/L	.05	.043	86		9		71 - 129	0 - 30
1,2-Dichloropropane	mg/L	.05	.045	90		4		72 - 128	0 - 30
1,3,5-Trimethylbenzene	mg/L	.05	.046	93		6		71 - 132	0 - 30
1,3-Dichlorobenzene	mg/L	.05	.046	93		6		74 - 126	0 - 30
1,3-Dichloropropane	mg/L	.05	.043	87		9		74 - 122	0 - 30
1,4-Dichlorobenzene	mg/L	.05	.047	94		4		72 - 122	0 - 30
2,2-Dichloropropane	mg/L	.05	.045	90		4		77 - 124	0 - 30
2-Butanone	mg/L	.05	.047	94		17		58 - 137	0 - 30
2-Chloroethylvinyl ether	mg/L	.05	.032	64		27		56 - 124	0 - 30
2-Chlorotoluene	mg/L	.05	.047	93		4		72 - 127	0 - 30
2-Hexanone	mg/L	.05	.049	98		22		50 - 135	0 - 30
4-Chlorotoluene	mg/L	.05	.046	93		6		75 - 126	0 - 30
4-Isopropyltoluene	mg/L	.05	.046	92		4		71 - 129	0 - 30
4-Methyl-2-pentanone	mg/L	.05	.044	89		19		57 - 132	0 - 30
Acetone	mg/L	.05	.05	99		13		44 - 156	0 - 30
Acrolein	mg/L	.25	.287	115		8		30 - 160	0 - 30
Acrylonitrile	mg/L	.25	.235	94		9		64 - 137	0 - 30
Benzene	mg/L	.05	.044	89		7		70 - 129	0 - 20
Bromobenzene	mg/L	.05	.046	93		6		71 - 120	0 - 30
Bromodichloromethane	mg/L	.05	.045	89		4		74 - 125	0 - 30
Bromoform	mg/L	.05	.047	93		14		64 - 122	0 - 30
Bromomethane	mg/L	.05	.043	87		5		47 - 138	0 - 30

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 out of 74 outside limits

Spike Recovery: 0 out of 148 outside limits

FORM III VOA-1

3A  
WATER VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Contract: \_\_\_\_\_

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Analytical Batch: 449012

Carbon disulfide	mg/L	.05	.044	88		2		69 - 136	0 - 30
Carbon tetrachloride	mg/L	.05	.045	90		4		76 - 128	0 - 30
Chlorobenzene	mg/L	.05	.046	92		6		74 - 123	0 - 20
Chloroethane	mg/L	.05	.044	88		7		62 - 141	0 - 30
Chloroform	mg/L	.05	.045	89		4		75 - 122	0 - 30
Chloromethane	mg/L	.05	.043	86		5		59 - 132	0 - 30
Cyclohexane	mg/L	.05	.046	92		4		69 - 132	0 - 30
Dibromochloromethane	mg/L	.05	.045	89		9		71 - 123	0 - 30
Dibromomethane	mg/L	.05	.043	86		9		72 - 129	0 - 30
Dichlorodifluoromethane	mg/L	.05	.043	85		2		58 - 140	0 - 30
Ethylbenzene	mg/L	.05	.045	91		6		74 - 126	0 - 30
Hexachlorobutadiene	mg/L	.05	.047	93		2		61 - 144	0 - 30
Isopropylbenzene (Cumene)	mg/L	.05	.045	90		6		71 - 125	0 - 30
Methyl Acetate	mg/L	.05	.043	85		19		57 - 139	0 - 30
Methyl iodide	mg/L	.05	.046	92		2		57 - 141	0 - 30
Methylcyclohexane	mg/L	.05	.045	91		4		67 - 138	0 - 30
Methylene chloride	mg/L	.05	.042	84		5		68 - 132	0 - 30
Naphthalene	mg/L	.05	.043	85		19		57 - 138	0 - 35
Styrene	mg/L	.05	.047	94		6		71 - 127	0 - 30
Tetrachloroethene	mg/L	.05	.045	90		4		68 - 128	0 - 30
Toluene	mg/L	.05	.046	92		4		72 - 120	0 - 20
Trichloroethene	mg/L	.05	.044	88		4		76 - 129	0 - 20
Trichlorofluoromethane	mg/L	.05	.045	90		2		72 - 136	0 - 30
Trichlorotrifluoroethane	mg/L	.05	.045	91		4		72 - 136	0 - 30
Vinyl acetate	mg/L	.05	.05	100		8		54 - 147	0 - 30
Vinyl chloride	mg/L	.05	.043	85		7		68 - 132	0 - 30
Xylene (total)	mg/L	.15	.137	91		4		74 - 127	0 - 30
cis-1,2-Dichloroethene	mg/L	.05	.044	88		7		73 - 130	0 - 30
cis-1,3-Dichloropropene	mg/L	.05	.045	90		6		71 - 132	0 - 30
m,p-Xylene	mg/L	.1	.092	92		4		74 - 126	0 - 30
n-Butylbenzene	mg/L	.05	.046	92		4		69 - 134	0 - 30
n-Propylbenzene	mg/L	.05	.047	94		4		75 - 129	0 - 30
o-Xylene	mg/L	.05	.045	90		6		73 - 130	0 - 30
sec-Butylbenzene	mg/L	.05	.046	93		6		70 - 136	0 - 30
tert-Butyl methyl ether (MTBE)	mg/L	.05	.044	87		7		71 - 125	0 - 30
tert-Butylbenzene	mg/L	.05	.047	93		2		72 - 126	0 - 30
trans-1,2-Dichloroethene	mg/L	.05	.044	89		4		69 - 132	0 - 30
trans-1,3-Dichloropropene	mg/L	.05	.045	90		6		71 - 131	0 - 30
trans-1,4-Dichloro-2-butene	mg/L	.05	.047	93		16		56 - 132	0 - 30

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 out of 74 outside limits

Spike Recovery: 0 out of 148 outside limits

FORM III VOA-1

3B  
SOIL VOLATILE MS/MSD RECOVERY

Lab Name: GCAL Sample ID T-15-F  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Contract: \_\_\_\_\_ Method: SW-846 8260  
 Analytical Batch: 449013

**SAMPLE NO : 21101140502**

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	MS CONCENTRATION	MS % REC	#	QC. LIMITS
1,1,1,2-Tetrachloroethane	mg/kg	3.04	0	2.97	98		77 - 122
1,1,1-Trichloroethane	mg/kg	3.04	0	2.93	96		70 - 130
1,1,2,2-Tetrachloroethane	mg/kg	3.04	0	2.77	91		66 - 129
1,1,2-Trichloroethane	mg/kg	3.04	0	2.71	89		74 - 120
1,1-Dichloroethane	mg/kg	3.04	0	2.97	98		71 - 126
1,1-Dichloroethene	mg/kg	3.04	0	2.94	97		68 - 129
1,1-Dichloropropene	mg/kg	3.04	0	2.95	97		70 - 138
1,2,3-Trichloropropane	mg/kg	3.04	0	2.58	85		63 - 132
1,2,4-Trichlorobenzene	mg/kg	3.04	0	2.71	89		64 - 135
1,2,4-Trimethylbenzene	mg/kg	3.04	0	3.01	99		75 - 130
1,2-Dibromo-3-chloropropane	mg/kg	3.04	0	2.53	83		60 - 123
1,2-Dibromoethane	mg/kg	3.04	0	2.75	90		74 - 122
1,2-Dichlorobenzene	mg/kg	3.04	0	2.96	97		76 - 125
1,2-Dichloroethane	mg/kg	3.04	0	2.85	94		68 - 126
1,2-Dichloropropane	mg/kg	3.04	0	3	99		72 - 129
1,3,5-Trimethylbenzene	mg/kg	3.04	0	3.01	99		74 - 136
1,3-Dichlorobenzene	mg/kg	3.04	0	2.98	98		77 - 127
1,3-Dichloropropane	mg/kg	3.04	0	2.79	92		77 - 121
1,4-Dichlorobenzene	mg/kg	3.04	0	3	99		74 - 123
2,2-Dichloropropane	mg/kg	3.04	0	2.91	96		74 - 129
2-Butanone	mg/kg	3.04	0	2.73	90		47 - 142
2-Chloroethylvinyl ether	mg/kg	3.04	0	2.18	72		42 - 134
2-Chlorotoluene	mg/kg	3.04	0	3.01	99		75 - 132
2-Hexanone	mg/kg	3.04	0	2.71	89		47 - 137
4-Chlorotoluene	mg/kg	3.04	0	3.03	100		74 - 133
4-Isopropyltoluene	mg/kg	3.04	0	2.95	97		71 - 136
4-Methyl-2-pentanone	mg/kg	3.04	0	2.57	84		52 - 136
Acetone	mg/kg	3.04	0	2.84	93		38 - 152
Acrolein	mg/kg	15.2	0	1.05	7	*	34 - 158
Acrylonitrile	mg/kg	15.2	0	13	86		49 - 142
Benzene	mg/kg	3.04	0	3.1	102		73 - 128
Bromobenzene	mg/kg	3.04	0	3.02	99		73 - 124
Bromodichloromethane	mg/kg	3.04	0	2.97	98		74 - 126
Bromoform	mg/kg	3.04	0	2.77	91		67 - 122
Bromomethane	mg/kg	3.04	0	2.78	92		48 - 139
Carbon disulfide	mg/kg	3.04	0	2.94	97		68 - 133

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 6 out of 74 outside limits

Spike Recovery: 3 out of 148 outside limits

FORM III VOA-2

3B  
SOIL VOLATILE MS/MSD RECOVERY

Lab Name: GCAL Sample ID T-15-F  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Contract: \_\_\_\_\_ Method: SW-846 8260

Analytical Batch: 449013

Carbon tetrachloride	mg/kg	3.04	0	2.9	95	71 - 133
Chlorobenzene	mg/kg	3.04	0	3.01	99	75 - 121
Chloroethane	mg/kg	3.04	0	2.64	87	57 - 144
Chloroform	mg/kg	3.04	.638	2.96	76	74 - 124
Chloromethane	mg/kg	3.04	0	2.63	86	61 - 130
Cyclohexane	mg/kg	3.04	0	3	99	70 - 136
Dibromochloromethane	mg/kg	3.04	0	2.84	93	74 - 122
Dibromomethane	mg/kg	3.04	0	2.81	92	72 - 125
Dichlorodifluoromethane	mg/kg	3.04	0	2.75	90	59 - 138
Ethylbenzene	mg/kg	3.04	0	2.94	97	74 - 130
Hexachlorobutadiene	mg/kg	3.04	0	2.76	91	71 - 140
Isopropylbenzene (Cumene)	mg/kg	3.04	0	2.91	96	74 - 125
Methyl Acetate	mg/kg	3.04	0	2.76	91	49 - 138
Methyl iodide	mg/kg	3.04	0	3.14	103	54 - 140
Methylcyclohexane	mg/kg	3.04	0	2.88	95	70 - 142
Methylene chloride	mg/kg	3.04	0	2.85	94	66 - 130
Naphthalene	mg/kg	3.04	0	2.42	80	54 - 132
Styrene	mg/kg	3.04	0	3.08	101	72 - 128
Tetrachloroethene	mg/kg	3.04	0	2.89	95	70 - 127
Toluene	mg/kg	3.04	0	3.02	99	74 - 121
Trichloroethene	mg/kg	3.04	.112	2.96	94	78 - 127
Trichlorofluoromethane	mg/kg	3.04	0	2.96	97	64 - 141
Trichlorotrifluoroethane	mg/kg	3.04	0	2.9	95	66 - 139
Vinyl acetate	mg/kg	3.04	0	2.13	70	53 - 140
Vinyl chloride	mg/kg	3.04	0	2.76	91	67 - 131
Xylene (total)	mg/kg	9.12	0	8.97	98	71 - 129
cis-1,2-Dichloroethene	mg/kg	3.04	.198	2.96	91	72 - 130
cis-1,3-Dichloropropene	mg/kg	3.04	0	2.96	97	72 - 129
m,p-Xylene	mg/kg	6.08	0	5.97	98	72 - 128
n-Butylbenzene	mg/kg	3.04	0	2.95	97	68 - 144
n-Propylbenzene	mg/kg	3.04	0	3.01	99	73 - 137
o-Xylene	mg/kg	3.04	0	3	99	69 - 133
sec-Butylbenzene	mg/kg	3.04	0	2.97	98	72 - 141
tert-Butyl methyl ether (MTBE)	mg/kg	3.04	0	2.77	91	69 - 126
tert-Butylbenzene	mg/kg	3.04	0	2.97	98	72 - 136
trans-1,2-Dichloroethene	mg/kg	3.04	0	2.97	98	67 - 134
trans-1,3-Dichloropropene	mg/kg	3.04	0	2.88	95	72 - 126
trans-1,4-Dichloro-2-butene	mg/kg	3.04	0	2.67	88	44 - 146

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 6 out of 74 outside limits

Spike Recovery: 3 out of 148 outside limits

FORM III VOA-2

3B  
SOIL VOLATILE MS/MSD RECOVERY

Lab Name: GCAL Sample ID T-15-F

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Contract: \_\_\_\_\_ Method: SW-846 8260

Analytical Batch: 449013

SAMPLE NO : 21101140503

COMPOUND	UNITS	SPIKE ADDED	MSD CONC.	MSD % REC	#	% RPD	#	QC. LIMITS REC	RPD
1,1,1,2-Tetrachloroethane	mg/kg	2.47	2.38	96		22		77 - 122	0 - 30
1,1,1-Trichloroethane	mg/kg	2.47	2.3	93		24		70 - 130	0 - 30
1,1,2,2-Tetrachloroethane	mg/kg	2.47	2.36	96		16		66 - 129	0 - 30
1,1,2-Trichloroethane	mg/kg	2.47	2.27	92		18		74 - 120	0 - 30
1,1-Dichloroethane	mg/kg	2.47	2.34	95		24		71 - 126	0 - 30
1,1-Dichloroethene	mg/kg	2.47	2.28	92		25	*	68 - 129	0 - 22
1,1-Dichloropropene	mg/kg	2.47	2.3	93		25		70 - 138	0 - 30
1,2,3-Trichloropropane	mg/kg	2.47	2.21	89		15		63 - 132	0 - 30
1,2,4-Trichlorobenzene	mg/kg	2.47	2.3	93		16		64 - 135	0 - 30
1,2,4-Trimethylbenzene	mg/kg	2.47	2.34	95		25		75 - 130	0 - 30
1,2-Dibromo-3-chloropropane	mg/kg	2.47	2.3	93		9		60 - 123	0 - 30
1,2-Dibromoethane	mg/kg	2.47	2.28	92		19		74 - 122	0 - 30
1,2-Dichlorobenzene	mg/kg	2.47	2.39	96		21		76 - 125	0 - 30
1,2-Dichloroethane	mg/kg	2.47	2.33	94		20		68 - 126	0 - 30
1,2-Dichloropropane	mg/kg	2.47	2.34	95		25		72 - 129	0 - 30
1,3,5-Trimethylbenzene	mg/kg	2.47	2.34	95		25		74 - 136	0 - 30
1,3-Dichlorobenzene	mg/kg	2.47	2.35	95		24		77 - 127	0 - 30
1,3-Dichloropropane	mg/kg	2.47	2.3	93		19		77 - 121	0 - 30
1,4-Dichlorobenzene	mg/kg	2.47	2.36	96		24		74 - 123	0 - 30
2,2-Dichloropropane	mg/kg	2.47	2.24	91		26		74 - 129	0 - 30
2-Butanone	mg/kg	2.47	2.54	103		7		47 - 142	0 - 30
2-Chloroethylvinyl ether	mg/kg	2.47	1.91	77		13		42 - 134	0 - 30
2-Chlorotoluene	mg/kg	2.47	2.36	96		24		75 - 132	0 - 30
2-Hexanone	mg/kg	2.47	2.55	103		6		47 - 137	0 - 30
4-Chlorotoluene	mg/kg	2.47	2.35	95		25		74 - 133	0 - 30
4-Isopropyltoluene	mg/kg	2.47	2.32	94		24		71 - 136	0 - 30
4-Methyl-2-pentanone	mg/kg	2.47	2.39	96		7		52 - 136	0 - 30
Acetone	mg/kg	2.47	2.6	105		9		38 - 152	0 - 30
Acrolein	mg/kg	12.4	2.45	20	*	80	*	34 - 158	0 - 30
Acrylonitrile	mg/kg	12.4	11.7	95		11		49 - 142	0 - 30
Benzene	mg/kg	2.47	2.36	96		27	*	73 - 128	0 - 21
Bromobenzene	mg/kg	2.47	2.36	96		24		73 - 124	0 - 30
Bromodichloromethane	mg/kg	2.47	2.35	95		23		74 - 126	0 - 30
Bromoform	mg/kg	2.47	2.39	96		15		67 - 122	0 - 30
Bromomethane	mg/kg	2.47	2.27	92		20		48 - 139	0 - 30
Carbon disulfide	mg/kg	2.47	2.27	92		26		68 - 133	0 - 30

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 6 out of 74 outside limits

Spike Recovery: 3 out of 148 outside limits

3B  
SOIL VOLATILE MS/MSD RECOVERY

Lab Name: GCAL Sample ID T-15-F  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Contract: \_\_\_\_\_ Method: SW-846 8260

Analytical Batch: 449013

Carbon tetrachloride	mg/kg	2.47	2.26	91		25		71 - 133	0 - 30
Chlorobenzene	mg/kg	2.47	2.39	96		23	*	75 - 121	0 - 21
Chloroethane	mg/kg	2.47	1.72	69		42	*	57 - 144	0 - 30
Chloroform	mg/kg	2.47	2.38	70	*	22		74 - 124	0 - 30
Chloromethane	mg/kg	2.47	2.13	86		21		61 - 130	0 - 30
Cyclohexane	mg/kg	2.47	2.36	96		24		70 - 136	0 - 30
Dibromochloromethane	mg/kg	2.47	2.3	93		21		74 - 122	0 - 30
Dibromomethane	mg/kg	2.47	2.28	92		21		72 - 125	0 - 30
Dichlorodifluoromethane	mg/kg	2.47	2.13	86		25		59 - 138	0 - 30
Ethylbenzene	mg/kg	2.47	2.29	93		25		74 - 130	0 - 30
Hexachlorobutadiene	mg/kg	2.47	2.3	93		18		71 - 140	0 - 30
Isopropylbenzene (Cumene)	mg/kg	2.47	2.33	94		22		74 - 125	0 - 30
Methyl Acetate	mg/kg	2.47	2.48	100		10		49 - 138	0 - 30
Methyl iodide	mg/kg	2.47	2.58	104		20		54 - 140	0 - 30
Methylcyclohexane	mg/kg	2.47	2.26	91		24		70 - 142	0 - 30
Methylene chloride	mg/kg	2.47	2.22	90		25		66 - 130	0 - 30
Naphthalene	mg/kg	2.47	2.28	92		6		54 - 132	0 - 30
Styrene	mg/kg	2.47	2.47	100		22		72 - 128	0 - 30
Tetrachloroethene	mg/kg	2.47	2.28	92		24		70 - 127	0 - 30
Toluene	mg/kg	2.47	2.39	96		23	*	74 - 121	0 - 21
Trichloroethene	mg/kg	2.47	2.34	90		23		78 - 127	0 - 24
Trichlorofluoromethane	mg/kg	2.47	2.27	92		26		64 - 141	0 - 30
Trichlorotrifluoroethane	mg/kg	2.47	2.27	92		24		66 - 139	0 - 30
Vinyl acetate	mg/kg	2.47	1.78	72		18		53 - 140	0 - 30
Vinyl chloride	mg/kg	2.47	2.18	88		23		67 - 131	0 - 30
Xylene (total)	mg/kg	7.43	7.04	95		24		71 - 129	0 - 30
cis-1,2-Dichloroethene	mg/kg	2.47	2.32	86		24		72 - 130	0 - 30
cis-1,3-Dichloropropene	mg/kg	2.47	2.39	96		21		72 - 129	0 - 30
m,p-Xylene	mg/kg	4.95	4.69	95		24		72 - 128	0 - 30
n-Butylbenzene	mg/kg	2.47	2.32	94		24		68 - 144	0 - 30
n-Propylbenzene	mg/kg	2.47	2.34	95		25		73 - 137	0 - 30
o-Xylene	mg/kg	2.47	2.35	95		24		69 - 133	0 - 30
sec-Butylbenzene	mg/kg	2.47	2.32	94		25		72 - 141	0 - 30
tert-Butyl methyl ether (MTBE)	mg/kg	2.47	2.34	95		17		69 - 126	0 - 30
tert-Butylbenzene	mg/kg	2.47	2.32	94		25		72 - 136	0 - 30
trans-1,2-Dichloroethene	mg/kg	2.47	2.32	94		25		67 - 134	0 - 30
trans-1,3-Dichloropropene	mg/kg	2.47	2.38	96		19		72 - 126	0 - 30
trans-1,4-Dichloro-2-butene	mg/kg	2.47	2.4	97		11		44 - 146	0 - 30

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 6 out of 74 outside limits

Spike Recovery: 3 out of 148 outside limits

FORM III VOA-2

3B  
SOIL VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Contract:

Method: SW-846 8260

Analytical Batch: 449013

SAMPLE NO : 913052

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS % REC	#	QC. LIMITS
1,1,1,2-Tetrachloroethane	mg/kg	2.5	0	2.45	98		77 - 122
1,1,1-Trichloroethane	mg/kg	2.5	0	2.32	93		70 - 130
1,1,2,2-Tetrachloroethane	mg/kg	2.5	0	2.9	116		66 - 129
1,1,2-Trichloroethane	mg/kg	2.5	0	2.34	94		74 - 120
1,1-Dichloroethane	mg/kg	2.5	0	2.36	94		71 - 126
1,1-Dichloroethene	mg/kg	2.5	0	2.32	93		68 - 129
1,1-Dichloropropene	mg/kg	2.5	0	2.35	94		70 - 138
1,2,3-Trichloropropane	mg/kg	2.5	0	2.5	100		63 - 132
1,2,4-Trichlorobenzene	mg/kg	2.5	0	2.51	100		64 - 135
1,2,4-Trimethylbenzene	mg/kg	2.5	0	2.42	97		75 - 130
1,2-Dibromo-3-chloropropane	mg/kg	2.5	0	2.8	112		60 - 123
1,2-Dibromoethane	mg/kg	2.5	0	2.34	94		74 - 122
1,2-Dichlorobenzene	mg/kg	2.5	0	2.49	100		76 - 125
1,2-Dichloroethane	mg/kg	2.5	0	2.33	93		68 - 126
1,2-Dichloropropane	mg/kg	2.5	0	2.35	94		72 - 129
1,3,5-Trimethylbenzene	mg/kg	2.5	0	2.42	97		74 - 136
1,3-Dichlorobenzene	mg/kg	2.5	0	2.45	98		77 - 127
1,3-Dichloropropane	mg/kg	2.5	0	2.34	94		77 - 121
1,4-Dichlorobenzene	mg/kg	2.5	0	2.46	98		74 - 123
2,2-Dichloropropane	mg/kg	2.5	0	2.37	95		74 - 129
2-Butanone	mg/kg	2.5	0	2.8	112		47 - 142
2-Chloroethylvinyl ether	mg/kg	2.5	0	2.11	84		42 - 134
2-Chlorotoluene	mg/kg	2.5	0	2.46	98		75 - 132
2-Hexanone	mg/kg	2.5	0	3.03	121		47 - 137
4-Chlorotoluene	mg/kg	2.5	0	2.44	98		74 - 133
4-Isopropyltoluene	mg/kg	2.5	0	2.4	96		71 - 136
4-Methyl-2-pentanone	mg/kg	2.5	0	2.64	106		52 - 136
Acetone	mg/kg	2.5	0	2.84	114		38 - 152
Acrolein	mg/kg	12.5	0	15.5	124		34 - 158
Acrylonitrile	mg/kg	12.5	0	12.9	103		49 - 142
Benzene	mg/kg	2.5	0	2.33	93		73 - 128
Bromobenzene	mg/kg	2.5	0	2.43	97		73 - 124
Bromodichloromethane	mg/kg	2.5	0	2.37	95		74 - 126
Bromoform	mg/kg	2.5	0	2.68	107		67 - 122
Bromomethane	mg/kg	2.5	0	2.27	91		48 - 139
Carbon disulfide	mg/kg	2.5	0	2.27	91		68 - 133

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 out of 74 outside limits

Spike Recovery: 0 out of 148 outside limits

FORM III VOA-2

3B  
SOIL VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Contract:

Method: SW-846 8260

Analytical Batch: 449013

Carbon tetrachloride	mg/kg	2.5	0	2.35	94	71 - 133
Chlorobenzene	mg/kg	2.5	0	2.44	98	75 - 121
Chloroethane	mg/kg	2.5	0	2.34	94	57 - 144
Chloroform	mg/kg	2.5	0	2.37	95	74 - 124
Chloromethane	mg/kg	2.5	0	2.23	89	61 - 130
Cyclohexane	mg/kg	2.5	0	2.42	97	70 - 136
Dibromochloromethane	mg/kg	2.5	0	2.44	98	74 - 122
Dibromomethane	mg/kg	2.5	0	2.32	93	72 - 125
Dichlorodifluoromethane	mg/kg	2.5	0	2.21	88	59 - 138
Ethylbenzene	mg/kg	2.5	0	2.37	95	74 - 130
Hexachlorobutadiene	mg/kg	2.5	0	2.39	96	71 - 140
Isopropylbenzene (Cumene)	mg/kg	2.5	0	2.39	96	74 - 125
Methyl Acetate	mg/kg	2.5	0	2.58	103	49 - 138
Methyl iodide	mg/kg	2.5	0	2.35	94	54 - 140
Methylcyclohexane	mg/kg	2.5	0	2.37	95	70 - 142
Methylene chloride	mg/kg	2.5	0	2.21	88	66 - 130
Naphthalene	mg/kg	2.5	0	2.58	103	54 - 132
Styrene	mg/kg	2.5	0	2.51	100	72 - 128
Tetrachloroethene	mg/kg	2.5	0	2.35	94	70 - 127
Toluene	mg/kg	2.5	0	2.42	97	74 - 121
Trichloroethene	mg/kg	2.5	0	2.28	91	78 - 127
Trichlorofluoromethane	mg/kg	2.5	0	2.32	93	64 - 141
Trichlorotrifluoroethane	mg/kg	2.5	0	2.36	94	66 - 139
Vinyl acetate	mg/kg	2.5	0	2.69	108	53 - 140
Vinyl chloride	mg/kg	2.5	0	2.29	92	67 - 131
Xylene (total)	mg/kg	7.5	0	7.17	96	71 - 129
cis-1,2-Dichloroethene	mg/kg	2.5	0	2.33	93	72 - 130
cis-1,3-Dichloropropene	mg/kg	2.5	0	2.39	96	72 - 129
m,p-Xylene	mg/kg	5	0	4.79	96	72 - 128
n-Butylbenzene	mg/kg	2.5	0	2.41	96	68 - 144
n-Propylbenzene	mg/kg	2.5	0	2.43	97	73 - 137
o-Xylene	mg/kg	2.5	0	2.38	95	69 - 133
sec-Butylbenzene	mg/kg	2.5	0	2.43	97	72 - 141
tert-Butyl methyl ether (MTBE)	mg/kg	2.5	0	2.37	95	69 - 126
tert-Butylbenzene	mg/kg	2.5	0	2.39	96	72 - 136
trans-1,2-Dichloroethene	mg/kg	2.5	0	2.29	92	67 - 134
trans-1,3-Dichloropropene	mg/kg	2.5	0	2.41	96	72 - 126
trans-1,4-Dichloro-2-butene	mg/kg	2.5	0	2.76	110	44 - 146

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 out of 74 outside limits

Spike Recovery: 0 out of 148 outside limits

FORM III VOA-2

3B  
SOIL VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Contract:

Method: SW-846 8260

Analytical Batch: 449013

SAMPLE NO : 913053

COMPOUND	UNITS	SPIKE ADDED	LCSD CONC.	LCSD % REC	#	% RPD	#	QC. LIMITS REC	RPD
1,1,1,2-Tetrachloroethane	mg/kg	2.5	2.29	92		7		77 - 122	0 - 30
1,1,1-Trichloroethane	mg/kg	2.5	2.22	89		4		70 - 130	0 - 30
1,1,2,2-Tetrachloroethane	mg/kg	2.5	2.45	98		17		66 - 129	0 - 30
1,1,2-Trichloroethane	mg/kg	2.5	2.15	86		8		74 - 120	0 - 30
1,1-Dichloroethane	mg/kg	2.5	2.21	88		7		71 - 126	0 - 30
1,1-Dichloroethene	mg/kg	2.5	2.24	90		4		68 - 129	0 - 30
1,1-Dichloropropene	mg/kg	2.5	2.24	90		5		70 - 138	0 - 30
1,2,3-Trichloropropane	mg/kg	2.5	2.19	88		13		63 - 132	0 - 30
1,2,4-Trichlorobenzene	mg/kg	2.5	2.25	90		11		64 - 135	0 - 30
1,2,4-Trimethylbenzene	mg/kg	2.5	2.31	92		5		75 - 130	0 - 30
1,2-Dibromo-3-chloropropane	mg/kg	2.5	2.31	92		19		60 - 123	0 - 30
1,2-Dibromoethane	mg/kg	2.5	2.14	86		9		74 - 122	0 - 30
1,2-Dichlorobenzene	mg/kg	2.5	2.33	93		7		76 - 125	0 - 30
1,2-Dichloroethane	mg/kg	2.5	2.16	86		8		68 - 126	0 - 30
1,2-Dichloropropane	mg/kg	2.5	2.25	90		4		72 - 129	0 - 30
1,3,5-Trimethylbenzene	mg/kg	2.5	2.32	93		4		74 - 136	0 - 30
1,3-Dichlorobenzene	mg/kg	2.5	2.32	93		5		77 - 127	0 - 30
1,3-Dichloropropane	mg/kg	2.5	2.17	87		8		77 - 121	0 - 30
1,4-Dichlorobenzene	mg/kg	2.5	2.34	94		5		74 - 123	0 - 30
2,2-Dichloropropane	mg/kg	2.5	2.25	90		5		74 - 129	0 - 30
2-Butanone	mg/kg	2.5	2.34	94		18		47 - 142	0 - 30
2-Chloroethylvinyl ether	mg/kg	2.5	1.61	64		27		42 - 134	0 - 30
2-Chlorotoluene	mg/kg	2.5	2.33	93		5		75 - 132	0 - 30
2-Hexanone	mg/kg	2.5	2.44	98		22		47 - 137	0 - 30
4-Chlorotoluene	mg/kg	2.5	2.32	93		5		74 - 133	0 - 30
4-Isopropyltoluene	mg/kg	2.5	2.3	92		4		71 - 136	0 - 30
4-Methyl-2-pentanone	mg/kg	2.5	2.21	88		18		52 - 136	0 - 30
Acetone	mg/kg	2.5	2.49	100		13		38 - 152	0 - 30
Acrolein	mg/kg	12.5	14.3	114		8		34 - 158	0 - 30
Acrylonitrile	mg/kg	12.5	11.7	94		10		49 - 142	0 - 30
Benzene	mg/kg	2.5	2.22	89		5		73 - 128	0 - 30
Bromobenzene	mg/kg	2.5	2.32	93		5		73 - 124	0 - 30
Bromodichloromethane	mg/kg	2.5	2.23	89		6		74 - 126	0 - 30
Bromoform	mg/kg	2.5	2.33	93		14		67 - 122	0 - 30
Bromomethane	mg/kg	2.5	2.17	87		5		48 - 139	0 - 30
Carbon disulfide	mg/kg	2.5	2.21	88		3		68 - 133	0 - 30

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 out of 74 outside limits

Spike Recovery: 0 out of 148 outside limits

FORM III VOA-2

3B  
SOIL VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Contract: \_\_\_\_\_

Method: SW-846 8260

Analytical Batch: 449013

Carbon tetrachloride	mg/kg	2.5	2.24	90		5		71 - 133	0 - 30
Chlorobenzene	mg/kg	2.5	2.31	92		5		75 - 121	0 - 30
Chloroethane	mg/kg	2.5	2.21	88		6		57 - 144	0 - 30
Chloroform	mg/kg	2.5	2.23	89		6		74 - 124	0 - 30
Chloromethane	mg/kg	2.5	2.14	86		4		61 - 130	0 - 30
Cyclohexane	mg/kg	2.5	2.3	92		5		70 - 136	0 - 30
Dibromochloromethane	mg/kg	2.5	2.22	89		9		74 - 122	0 - 30
Dibromomethane	mg/kg	2.5	2.14	86		8		72 - 125	0 - 30
Dichlorodifluoromethane	mg/kg	2.5	2.13	85		4		59 - 138	0 - 30
Ethylbenzene	mg/kg	2.5	2.26	90		5		74 - 130	0 - 30
Hexachlorobutadiene	mg/kg	2.5	2.33	93		3		71 - 140	0 - 30
Isopropylbenzene (Cumene)	mg/kg	2.5	2.26	90		6		74 - 125	0 - 30
Methyl Acetate	mg/kg	2.5	2.13	85		19		49 - 138	0 - 30
Methyl iodide	mg/kg	2.5	2.29	92		3		54 - 140	0 - 30
Methylcyclohexane	mg/kg	2.5	2.26	90		5		70 - 142	0 - 30
Methylene chloride	mg/kg	2.5	2.1	84		5		66 - 130	0 - 30
Naphthalene	mg/kg	2.5	2.13	85		19		54 - 132	0 - 30
Styrene	mg/kg	2.5	2.35	94		7		72 - 128	0 - 30
Tetrachloroethene	mg/kg	2.5	2.24	90		5		70 - 127	0 - 30
Toluene	mg/kg	2.5	2.31	92		5		74 - 121	0 - 30
Trichloroethene	mg/kg	2.5	2.2	88		4		78 - 127	0 - 30
Trichlorofluoromethane	mg/kg	2.5	2.25	90		3		64 - 141	0 - 30
Trichlorotrifluoroethane	mg/kg	2.5	2.27	91		4		66 - 139	0 - 30
Vinyl acetate	mg/kg	2.5	2.49	100		8		53 - 140	0 - 30
Vinyl chloride	mg/kg	2.5	2.13	85		7		67 - 131	0 - 30
Xylene (total)	mg/kg	7.5	6.84	91		5		71 - 129	0 - 30
cis-1,2-Dichloroethene	mg/kg	2.5	2.2	88		6		72 - 130	0 - 30
cis-1,3-Dichloropropene	mg/kg	2.5	2.25	90		6		72 - 129	0 - 30
m,p-Xylene	mg/kg	5	4.59	92		4		72 - 128	0 - 30
n-Butylbenzene	mg/kg	2.5	2.31	92		4		68 - 144	0 - 30
n-Propylbenzene	mg/kg	2.5	2.34	94		4		73 - 137	0 - 30
o-Xylene	mg/kg	2.5	2.25	90		6		69 - 133	0 - 30
sec-Butylbenzene	mg/kg	2.5	2.32	93		5		72 - 141	0 - 30
tert-Butyl methyl ether (MTBE)	mg/kg	2.5	2.17	87		9		69 - 126	0 - 30
tert-Butylbenzene	mg/kg	2.5	2.32	93		3		72 - 136	0 - 30
trans-1,2-Dichloroethene	mg/kg	2.5	2.22	89		3		67 - 134	0 - 30
trans-1,3-Dichloropropene	mg/kg	2.5	2.25	90		7		72 - 126	0 - 30
trans-1,4-Dichloro-2-butene	mg/kg	2.5	2.33	93		17		44 - 146	0 - 30

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 out of 74 outside limits

Spike Recovery: 0 out of 148 outside limits

FORM III VOA-2

3B  
SOIL VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Contract: \_\_\_\_\_

Method: SW-846 8260

Analytical Batch: 449157

**SAMPLE NO : 913706**

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS % REC	#	QC. LIMITS
1,1,1,2-Tetrachloroethane	mg/kg	2.5	0	2.44	98		77 - 122
1,1,1-Trichloroethane	mg/kg	2.5	0	2.62	105		70 - 130
1,1,2,2-Tetrachloroethane	mg/kg	2.5	0	2.54	102		66 - 129
1,1,2-Trichloroethane	mg/kg	2.5	0	2.6	104		74 - 120
1,1-Dichloroethane	mg/kg	2.5	0	2.74	110		71 - 126
1,1-Dichloroethene	mg/kg	2.5	0	2.67	107		68 - 129
1,1-Dichloropropene	mg/kg	2.5	0	2.65	106		70 - 138
1,2,3-Trichloropropane	mg/kg	2.5	0	2.58	103		63 - 132
1,2,4-Trichlorobenzene	mg/kg	2.5	0	2.8	112		64 - 135
1,2,4-Trimethylbenzene	mg/kg	2.5	0	2.65	106		75 - 130
1,2-Dibromo-3-chloropropane	mg/kg	2.5	0	2.73	109		60 - 123
1,2-Dibromoethane	mg/kg	2.5	0	2.68	107		74 - 122
1,2-Dichlorobenzene	mg/kg	2.5	0	2.61	104		76 - 125
1,2-Dichloroethane	mg/kg	2.5	0	2.66	106		68 - 126
1,2-Dichloropropane	mg/kg	2.5	0	2.72	109		72 - 129
1,3,5-Trimethylbenzene	mg/kg	2.5	0	2.7	108		74 - 136
1,3-Dichlorobenzene	mg/kg	2.5	0	2.57	103		77 - 127
1,3-Dichloropropane	mg/kg	2.5	0	2.56	102		77 - 121
1,4-Dichlorobenzene	mg/kg	2.5	0	2.53	101		74 - 123
2,2-Dichloropropane	mg/kg	2.5	0	2.67	107		74 - 129
2-Butanone	mg/kg	2.5	0	2.8	112		47 - 142
2-Chloroethylvinyl ether	mg/kg	2.5	0	2.47	99		42 - 134
2-Chlorotoluene	mg/kg	2.5	0	2.55	102		75 - 132
2-Hexanone	mg/kg	2.5	0	2.75	110		47 - 137
4-Chlorotoluene	mg/kg	2.5	0	2.61	104		74 - 133
4-Isopropyltoluene	mg/kg	2.5	0	2.76	110		71 - 136
4-Methyl-2-pentanone	mg/kg	2.5	0	2.82	113		52 - 136
Acetone	mg/kg	2.5	0	2.58	103		38 - 152
Acrolein	mg/kg	12.5	0	11.6	93		34 - 158
Acrylonitrile	mg/kg	12.5	0	12.8	102		49 - 142
Benzene	mg/kg	2.5	0	2.56	102		73 - 128
Bromobenzene	mg/kg	2.5	0	2.41	96		73 - 124
Bromodichloromethane	mg/kg	2.5	0	2.71	108		74 - 126
Bromoform	mg/kg	2.5	0	2.75	110		67 - 122
Bromomethane	mg/kg	2.5	0	2.53	101		48 - 139
Carbon disulfide	mg/kg	2.5	0	2.85	114		68 - 133

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 out of 74 outside limits

Spike Recovery: 0 out of 148 outside limits

FORM III VOA-2

3B  
SOIL VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Contract: \_\_\_\_\_

Method: SW-846 8260

Analytical Batch: 449157

Carbon tetrachloride	mg/kg	2.5	0	2.83	113	71	-	133
Chlorobenzene	mg/kg	2.5	0	2.5	100	75	-	121
Chloroethane	mg/kg	2.5	0	2.83	113	57	-	144
Chloroform	mg/kg	2.5	0	2.67	107	74	-	124
Chloromethane	mg/kg	2.5	0	2.66	106	61	-	130
Cyclohexane	mg/kg	2.5	0	2.74	110	70	-	136
Dibromochloromethane	mg/kg	2.5	0	2.65	106	74	-	122
Dibromomethane	mg/kg	2.5	0	2.69	108	72	-	125
Dichlorodifluoromethane	mg/kg	2.5	0	2.83	113	59	-	138
Ethylbenzene	mg/kg	2.5	0	2.47	99	74	-	130
Hexachlorobutadiene	mg/kg	2.5	0	2.89	116	71	-	140
Isopropylbenzene (Cumene)	mg/kg	2.5	0	2.72	109	74	-	125
Methyl Acetate	mg/kg	2.5	0	2.78	111	49	-	138
Methyl iodide	mg/kg	2.5	0	2.18	87	54	-	140
Methylcyclohexane	mg/kg	2.5	0	2.91	116	70	-	142
Methylene chloride	mg/kg	2.5	0	2.57	103	66	-	130
Naphthalene	mg/kg	2.5	0	2.9	116	54	-	132
Styrene	mg/kg	2.5	0	2.65	106	72	-	128
Tetrachloroethene	mg/kg	2.5	0	2.61	104	70	-	127
Toluene	mg/kg	2.5	0	2.48	99	74	-	121
Trichloroethene	mg/kg	2.5	0	2.59	104	78	-	127
Trichlorofluoromethane	mg/kg	2.5	0	2.73	109	64	-	141
Trichlorotrifluoroethane	mg/kg	2.5	0	2.79	112	66	-	139
Vinyl acetate	mg/kg	2.5	0	1.84	74	53	-	140
Vinyl chloride	mg/kg	2.5	0	2.67	107	67	-	131
Xylene (total)	mg/kg	7.5	0	7.71	103	71	-	129
cis-1,2-Dichloroethene	mg/kg	2.5	0	2.7	108	72	-	130
cis-1,3-Dichloropropene	mg/kg	2.5	0	2.81	112	72	-	129
m,p-Xylene	mg/kg	5	0	5.11	102	72	-	128
n-Butylbenzene	mg/kg	2.5	0	2.88	115	68	-	144
n-Propylbenzene	mg/kg	2.5	0	2.6	104	73	-	137
o-Xylene	mg/kg	2.5	0	2.6	104	69	-	133
sec-Butylbenzene	mg/kg	2.5	0	2.73	109	72	-	141
tert-Butyl methyl ether (MTBE)	mg/kg	2.5	0	2.66	106	69	-	126
tert-Butylbenzene	mg/kg	2.5	0	2.63	105	72	-	136
trans-1,2-Dichloroethene	mg/kg	2.5	0	2.65	106	67	-	134
trans-1,3-Dichloropropene	mg/kg	2.5	0	2.75	110	72	-	126
trans-1,4-Dichloro-2-butene	mg/kg	2.5	0	2.58	103	44	-	146

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 74 outside limits

Spike Recovery: 0 out of 148 outside limits

FORM III VOA-2

3B  
SOIL VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Contract: \_\_\_\_\_

Method: SW-846 8260

Analytical Batch: 449157

**SAMPLE NO :** 913707

COMPOUND	UNITS	SPIKE ADDED	LCSD CONC.	LCSD % REC	#	% RPD	#	QC. LIMITS REC	RPD
1,1,1,2-Tetrachloroethane	mg/kg	2.5	2.33	93		5		77 - 122	0 - 30
1,1,1-Trichloroethane	mg/kg	2.5	2.62	105		0		70 - 130	0 - 30
1,1,2,2-Tetrachloroethane	mg/kg	2.5	2.37	95		7		66 - 129	0 - 30
1,1,2-Trichloroethane	mg/kg	2.5	2.49	100		4		74 - 120	0 - 30
1,1-Dichloroethane	mg/kg	2.5	2.65	106		3		71 - 126	0 - 30
1,1-Dichloroethene	mg/kg	2.5	2.6	104		3		68 - 129	0 - 30
1,1-Dichloropropene	mg/kg	2.5	2.54	102		4		70 - 138	0 - 30
1,2,3-Trichloropropane	mg/kg	2.5	2.35	94		9		63 - 132	0 - 30
1,2,4-Trichlorobenzene	mg/kg	2.5	2.52	101		11		64 - 135	0 - 30
1,2,4-Trimethylbenzene	mg/kg	2.5	2.41	96		9		75 - 130	0 - 30
1,2-Dibromo-3-chloropropane	mg/kg	2.5	2.54	102		7		60 - 123	0 - 30
1,2-Dibromoethane	mg/kg	2.5	2.53	101		6		74 - 122	0 - 30
1,2-Dichlorobenzene	mg/kg	2.5	2.36	94		10		76 - 125	0 - 30
1,2-Dichloroethane	mg/kg	2.5	2.49	100		7		68 - 126	0 - 30
1,2-Dichloropropane	mg/kg	2.5	2.64	106		3		72 - 129	0 - 30
1,3,5-Trimethylbenzene	mg/kg	2.5	2.45	98		10		74 - 136	0 - 30
1,3-Dichlorobenzene	mg/kg	2.5	2.35	94		9		77 - 127	0 - 30
1,3-Dichloropropane	mg/kg	2.5	2.45	98		4		77 - 121	0 - 30
1,4-Dichlorobenzene	mg/kg	2.5	2.33	93		8		74 - 123	0 - 30
2,2-Dichloropropane	mg/kg	2.5	2.65	106		.8		74 - 129	0 - 30
2-Butanone	mg/kg	2.5	2.53	101		10		47 - 142	0 - 30
2-Chloroethylvinyl ether	mg/kg	2.5	2.81	112		13		42 - 134	0 - 30
2-Chlorotoluene	mg/kg	2.5	2.37	95		7		75 - 132	0 - 30
2-Hexanone	mg/kg	2.5	2.67	107		3		47 - 137	0 - 30
4-Chlorotoluene	mg/kg	2.5	2.38	95		9		74 - 133	0 - 30
4-Isopropyltoluene	mg/kg	2.5	2.44	98		12		71 - 136	0 - 30
4-Methyl-2-pentanone	mg/kg	2.5	2.77	111		2		52 - 136	0 - 30
Acetone	mg/kg	2.5	2.67	107		3		38 - 152	0 - 30
Acrolein	mg/kg	12.5	11.6	93		0		34 - 158	0 - 30
Acrylonitrile	mg/kg	12.5	12.7	102		.8		49 - 142	0 - 30
Benzene	mg/kg	2.5	2.52	101		2		73 - 128	0 - 30
Bromobenzene	mg/kg	2.5	2.23	89		8		73 - 124	0 - 30
Bromodichloromethane	mg/kg	2.5	2.68	107		1		74 - 126	0 - 30
Bromoform	mg/kg	2.5	2.6	104		6		67 - 122	0 - 30
Bromomethane	mg/kg	2.5	2.51	100		.8		48 - 139	0 - 30
Carbon disulfide	mg/kg	2.5	2.75	110		4		68 - 133	0 - 30

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 out of 74 outside limits

Spike Recovery: 0 out of 148 outside limits

FORM III VOA-2

3B  
SOIL VOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Contract: \_\_\_\_\_

Method: SW-846 8260

Analytical Batch: 449157

Carbon tetrachloride	mg/kg	2.5	2.74	110		3		71 - 133	0 - 30
Chlorobenzene	mg/kg	2.5	2.45	98		2		75 - 121	0 - 30
Chloroethane	mg/kg	2.5	2.8	112		1		57 - 144	0 - 30
Chloroform	mg/kg	2.5	2.62	105		2		74 - 124	0 - 30
Chloromethane	mg/kg	2.5	2.88	115		8		61 - 130	0 - 30
Cyclohexane	mg/kg	2.5	2.54	102		8		70 - 136	0 - 30
Dibromochloromethane	mg/kg	2.5	2.65	106		0		74 - 122	0 - 30
Dibromomethane	mg/kg	2.5	2.51	100		7		72 - 125	0 - 30
Dichlorodifluoromethane	mg/kg	2.5	3.04	122		7		59 - 138	0 - 30
Ethylbenzene	mg/kg	2.5	2.43	97		2		74 - 130	0 - 30
Hexachlorobutadiene	mg/kg	2.5	2.42	97		18		71 - 140	0 - 30
Isopropylbenzene (Cumene)	mg/kg	2.5	2.59	104		5		74 - 125	0 - 30
Methyl Acetate	mg/kg	2.5	2.89	116		4		49 - 138	0 - 30
Methyl iodide	mg/kg	2.5	2.18	87		0		54 - 140	0 - 30
Methylcyclohexane	mg/kg	2.5	2.76	110		5		70 - 142	0 - 30
Methylene chloride	mg/kg	2.5	2.48	99		4		66 - 130	0 - 30
Naphthalene	mg/kg	2.5	2.73	109		6		54 - 132	0 - 30
Styrene	mg/kg	2.5	2.65	106		0		72 - 128	0 - 30
Tetrachloroethene	mg/kg	2.5	2.48	99		5		70 - 127	0 - 30
Toluene	mg/kg	2.5	2.47	99		.4		74 - 121	0 - 30
Trichloroethene	mg/kg	2.5	2.59	104		0		78 - 127	0 - 30
Trichlorofluoromethane	mg/kg	2.5	2.7	108		1		64 - 141	0 - 30
Trichlorotrifluoroethane	mg/kg	2.5	2.67	107		4		66 - 139	0 - 30
Vinyl acetate	mg/kg	2.5	1.61	64		13		53 - 140	0 - 30
Vinyl chloride	mg/kg	2.5	2.89	116		8		67 - 131	0 - 30
Xylene (total)	mg/kg	7.5	7.6	101		1		71 - 129	0 - 30
cis-1,2-Dichloroethene	mg/kg	2.5	2.58	103		5		72 - 130	0 - 30
cis-1,3-Dichloropropene	mg/kg	2.5	2.63	105		7		72 - 129	0 - 30
m,p-Xylene	mg/kg	5	5.1	102		.2		72 - 128	0 - 30
n-Butylbenzene	mg/kg	2.5	2.55	102		12		68 - 144	0 - 30
n-Propylbenzene	mg/kg	2.5	2.34	94		11		73 - 137	0 - 30
o-Xylene	mg/kg	2.5	2.5	100		4		69 - 133	0 - 30
sec-Butylbenzene	mg/kg	2.5	2.39	96		13		72 - 141	0 - 30
tert-Butyl methyl ether (MTBE)	mg/kg	2.5	2.61	104		2		69 - 126	0 - 30
tert-Butylbenzene	mg/kg	2.5	2.36	94		11		72 - 136	0 - 30
trans-1,2-Dichloroethene	mg/kg	2.5	2.64	106		.4		67 - 134	0 - 30
trans-1,3-Dichloropropene	mg/kg	2.5	2.5	100		10		72 - 126	0 - 30
trans-1,4-Dichloro-2-butene	mg/kg	2.5	2.21	88		15		44 - 146	0 - 30

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD : 0 out of 74 outside limits

Spike Recovery: 0 out of 148 outside limits

FORM III VOA-2

4A  
VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

MB913048

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Lab File ID: 2110116/a8963 Lab Sample ID: 913048 Date Extracted: \_\_\_\_\_

GC Column: RTX-VMS-30 ID: .25 (mm) Date Analyzed: 01/16/11 Time: 1033

Instrument ID: MSV11 Matrix: Water Heated Purge: N

Level: LOW

Prep Batch: \_\_\_\_\_ Analytical Batch: 449012

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	<b>SAMPLE NO.</b>	<b>LAB SAMPLE ID</b>	<b>LAB FILE ID</b>	<b>DATE ANALYZED</b>	<b>TIME ANALYZED</b>
1.	LCS913049	913049	2110116/a8960L	01/16/11	0923
2.	LCSD913050	913050	2110116/a8961	01/16/11	0946
3.	EQUIPMENT BLANK	21101140514	2110116/a8966	01/16/11	1142
4.	TRIP BLANK 1	21101140515	2110116/a8967	01/16/11	1205
5.	TRIP BLANK 2	21101140516	2110116/a8968	01/16/11	1228

4A  
VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

MB913051

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Lab File ID: 2110116/a8964 Lab Sample ID: 913051 Date Extracted: \_\_\_\_\_  
 GC Column: RTX-VMS-30 ID: .25 (mm) Date Analyzed: 01/16/11 Time: 1055  
 Instrument ID: MSV11 Matrix: Solid Heated Purge: Y  
 Level: LOW  
 Prep Batch: \_\_\_\_\_ Analytical Batch: 449013

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1.	LCS913052	913052	2110116/a8960s	01/16/11	0923
2.	LCSD913053	913053	2110116/a8961s	01/16/11	0946
3.	T-15-F	21101140501	2110116/a8965	01/16/11	1118
4.	T-15-F MS	21101140502	2110116/a8972	01/16/11	1401
5.	T-15-F MSD	21101140503	2110116/a8973	01/16/11	1425
6.	T-21-F	21101140504	2110116/a8977	01/16/11	1603
7.	NC-0-0.3	21101140505	2110116/a8978	01/16/11	1627
8.	T-6-NORTH	21101140510	2110116/a8979	01/16/11	1651
9.	SC-W	21101140512	2110116/a8980	01/16/11	1715
10.	SC-E	21101140513	2110116/a8981	01/16/11	1739
11.	T-6-FLOOR	21101140507	2110116/a8982	01/16/11	1809
12.	T-6-EAST	21101140508	2110116/a8984	01/16/11	1857
13.	T-6-SOUTH	21101140509	2110116/a8985	01/16/11	1922
14.	BLIND DUP	21101140511	2110116/a8986	01/16/11	1946

4A  
VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

MB913705

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Lab File ID: 2110118p/k9909 Lab Sample ID: 913705 Date Extracted: \_\_\_\_\_

GC Column: RTX-VMS-30 ID: .25 (mm) Date Analyzed: 01/18/11 Time: 1455

Instrument ID: MSV5 Matrix: Solid Heated Purge: Y

Level: LOW

Prep Batch: \_\_\_\_\_ Analytical Batch: 449157

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	<b>SAMPLE NO.</b>	<b>LAB SAMPLE ID</b>	<b>LAB FILE ID</b>	<b>DATE ANALYZED</b>	<b>TIME ANALYZED</b>
1.	LCS913706	913706	2110118p/k9905	01/18/11	1319
2.	LCSD913707	913707	2110118p/k9906	01/18/11	1342
3.	T-2-WEST	21101140506	2110118p/k9911	01/18/11	1541

5A  
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Lab File ID: 2110114/a8912B BFB Injection Date: 01/14/11  
 Instrument ID: MSV11 BFB Injection Time: 0948  
 GC Column: RTX-VMS-30 ID: .25 (mm)  
 Analytical Batch: 448996

<i>m/e</i>	<i>ION ABUNDANCE CRITERIA</i>	<i>% Relative Abundance</i>		
50	15.0 - 40.0% of mass 95	19.72	( )	
75	30.0 - 60.0% of mass 95	48.91	( )	
95	Base Peak, 100% relative abundance	100	( )	
96	5.0 - 9.0% of mass 95	6.73	( )	
173	Less than 2.0% of mass 174	.24	( .29 )	1
174	50.0 - 120.0% of mass 95	85.86	( )	
175	5.0 - 9.0% of mass 174	6.7	( 7.81 )	1
176	95.0 - 101.0% of mass 174	82.19	( 95.73 )	1
177	5.0 - 9.0% of mass 176	5.39	( 6.56 )	2

1- Value is % mass 174

2- Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	<i>SAMPLE NO.</i>	<i>LAB SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1.	V11STD001PPB	1208	2110114/a8914	01/14/11	1109
2.	V11STD005PPB	1201	2110114/a8915	01/14/11	1141
3.	V11STD010PPB	1206	2110114/a8916	01/14/11	1209
4.	V11STD020PPB	1202	2110114/a8917	01/14/11	1241
5.	V11STD050PPB	1203	2110114/a8918	01/14/11	1315
6.	V11STD100PPB	1204	2110114/a8919	01/14/11	1348
7.	V11STD200PPB	1205	2110114/a8920	01/14/11	1428
8.	V11ICV	1600	2110114/a8922	01/14/11	1530

5A  
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE ( BFB )

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Lab File ID: 2110115/a8930B BFB Injection Date: 01/15/11  
 Instrument ID: MSV11 BFB Injection Time: 0816  
 GC Column: RTX-VMS-30 ID: .25 (mm)  
 Analytical Batch: 449014

<i>m / e</i>	<i>ION ABUNDANCE CRITERIA</i>	<i>% Relative Abundance</i>		
50	15.0 - 40.0% of mass 95	21.8	( )	
75	30.0 - 60.0% of mass 95	48.58	( )	
95	Base Peak, 100% relative abundance	100	( )	
96	5.0 -9.0% of mass 95	6.81	( )	
173	Less than 2.0% of mass 174	.49	( .56 )	1
174	50.0 - 120.0% of mass 95	88.74	( )	
175	5.0 - 9.0% of mass 174	6.88	( 7.76 )	1
176	95.0 - 101.0% of mass 174	86.84	( 97.86 )	1
177	5.0 - 9.0% of mass 176	5.34	( 6.16 )	2

1- Value is % mass 174

2- Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	<i>SAMPLE NO.</i>	<i>LAB SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1.	V11STD005PPB	1201	2110115/a8933	01/15/11	0957
2.	V11STD010PPB	1206	2110115/a8934	01/15/11	1021
3.	V11STD020PPB	1202	2110115/a8935	01/15/11	1045
4.	V11STD050PPB	1203	2110115/a8936	01/15/11	1109
5.	V11STD100PPB	1204	2110115/a8937	01/15/11	1132
6.	V11STD200PPB	1205	2110115/a8938	01/15/11	1155
7.	V11STD001PPB	1208	2110115/a8941	01/15/11	1306
8.	V11ICV	1600	2110115/a8944	01/15/11	1459

5A  
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Lab File ID: 2110116/a8958 BFB Injection Date: 01/16/11  
 Instrument ID: MSV11 BFB Injection Time: 0811  
 GC Column: RTX-VMS-30 ID: .25 (mm)  
 Analytical Batch: 449012

<i>m/e</i>	<i>ION ABUNDANCE CRITERIA</i>	<i>% Relative Abundance</i>		
50	15.0 - 40.0% of mass 95	19.89	( )	
75	30.0 - 60.0% of mass 95	50.58	( )	
95	Base Peak, 100% relative abundance	100	( )	
96	5.0 - 9.0% of mass 95	6.63	( )	
173	Less than 2.0% of mass 174	0	( 0 )	1
174	50.0 - 120.0% of mass 95	88.66	( )	
175	5.0 - 9.0% of mass 174	7.54	( 8.51 )	1
176	95.0 - 101.0% of mass 174	87.03	( 98.17 )	1
177	5.0 - 9.0% of mass 176	5.51	( 6.34 )	2

1- Value is % mass 174

2- Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	<i>SAMPLE NO.</i>	<i>LAB SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1.	V11STD050APP9	1400	2110116/a8959	01/16/11	0859
2.	V11STD050	1400	2110116/a8960	01/16/11	0923
3.	LCS913049	913049	2110116/a8960L	01/16/11	0923
4.	LCSD913050	913050	2110116/a8961	01/16/11	0946
5.	MB913048	913048	2110116/a8963	01/16/11	1033
6.	EQUIPMENT BLANK	21101140514	2110116/a8966	01/16/11	1142
7.	TRIP BLANK 1	21101140515	2110116/a8967	01/16/11	1205
8.	TRIP BLANK 2	21101140516	2110116/a8968	01/16/11	1228

5A  
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Lab File ID: 2110116/a8958s BFB Injection Date: 01/16/11  
 Instrument ID: MSV11 BFB Injection Time: 0811  
 GC Column: RTX-VMS-30 ID: .25 (mm)  
 Analytical Batch: 449013

<i>m/e</i>	<i>ION ABUNDANCE CRITERIA</i>	<i>% Relative Abundance</i>		
50	15.0 - 40.0% of mass 95	19.89	( )	
75	30.0 - 60.0% of mass 95	50.58	( )	
95	Base Peak, 100% relative abundance	100	( )	
96	5.0 -9.0% of mass 95	6.63	( )	
173	Less than 2.0% of mass 174	0	( 0 )	1
174	50.0 - 120.0% of mass 95	88.66	( )	
175	5.0 - 9.0% of mass 174	7.54	( 8.51 )	1
176	95.0 - 101.0% of mass 174	87.03	( 98.17 )	1
177	5.0 - 9.0% of mass 176	5.51	( 6.34 )	2

1- Value is % mass 174

2- Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	<i>SAMPLE NO.</i>	<i>LAB SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1.	V11STD050APP9	1400	2110116/a8959s	01/16/11	0859
2.	V11STD050	1400	2110116/a8960s	01/16/11	0923
3.	LCS913052	913052	2110116/a8960s	01/16/11	0923
4.	LCSD913053	913053	2110116/a8961s	01/16/11	0946
5.	MB913051	913051	2110116/a8964	01/16/11	1055
6.	T-15-F	21101140501	2110116/a8965	01/16/11	1118
7.	T-15-F MS	21101140502	2110116/a8972	01/16/11	1401
8.	T-15-F MSD	21101140503	2110116/a8973	01/16/11	1425
9.	T-21-F	21101140504	2110116/a8977	01/16/11	1603
10.	NC-0-0.3	21101140505	2110116/a8978	01/16/11	1627
11.	T-6-NORTH	21101140510	2110116/a8979	01/16/11	1651
12.	SC-W	21101140512	2110116/a8980	01/16/11	1715
13.	SC-E	21101140513	2110116/a8981	01/16/11	1739
14.	T-6-FLOOR	21101140507	2110116/a8982	01/16/11	1809
15.	T-6-EAST	21101140508	2110116/a8984	01/16/11	1857
16.	T-6-SOUTH	21101140509	2110116/a8985	01/16/11	1922

FORM V VOA

5A  
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL Contract: \_\_\_\_\_  
Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
Lab File ID: 2110116/a8958s BFB Injection Date: 01/16/11  
Instrument ID: MSV11 BFB Injection Time: 0811  
GC Column: RTX-VMS-30 ID: .25 (mm)  
Analytical Batch: 449013

17 .	BLIND DUP	21101140511	2110116/a8986	01/16/11	1946
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5A  
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Lab File ID: 2110107/k9745 BFB Injection Date: 01/07/11  
 Instrument ID: MSV5 BFB Injection Time: 1024  
 GC Column: RTX-VMS-30 ID: .25 (mm)  
 Analytical Batch: 448597

<i>m / e</i>	<i>ION ABUNDANCE CRITERIA</i>	<i>% Relative Abundance</i>			
50	15.0 - 40.0% of mass 95	20.1	(		)
75	30.0 - 60.0% of mass 95	48.92	(		)
95	Base Peak, 100% relative abundance	100	(		)
96	5.0 -9.0% of mass 95	6.24	(		)
173	Less than 2.0% of mass 174	0	(	0	) 1
174	50.0 - 120.0% of mass 95	74.06	(		)
175	5.0 - 9.0% of mass 174	5.84	(	7.89	) 1
176	95.0 - 101.0% of mass 174	72.34	(	97.69	) 1
177	5.0 - 9.0% of mass 176	4.32	(	5.98	) 2

1- Value is % mass 174

2- Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	<i>SAMPLE NO.</i>	<i>LAB SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1.	V5APP9	1207	2110107/k9746	01/07/11	1114
2.	V5APP9	1201	2110107/k9747	01/07/11	1136
3.	V5APP9	1202	2110107/k9749	01/07/11	1221
4.	V5APP9	1203	2110107/k9750	01/07/11	1243
5.	V5APP9	1204	2110107/k9751	01/07/11	1306
6.	V5APP9	1205	2110107/k9752	01/07/11	1330
7.	V5APP9	1206	2110107/k9755	01/07/11	1542
8.	APP9ICV	1600	2110107/k9756	01/07/11	1604

5A  
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Lab File ID: 2110107p/k9757 BFB Injection Date: 01/07/11  
 Instrument ID: MSV5 BFB Injection Time: 1702  
 GC Column: RTX-VMS-30 ID: .25 (mm)  
 Analytical Batch: 448598

<i>m / e</i>	<i>ION ABUNDANCE CRITERIA</i>	<i>% Relative Abundance</i>		
50	15.0 - 40.0% of mass 95	20.56	( )	
75	30.0 - 60.0% of mass 95	47.75	( )	
95	Base Peak, 100% relative abundance	100	( )	
96	5.0 -9.0% of mass 95	5.95	( )	
173	Less than 2.0% of mass 174	0	( 0 )	1
174	50.0 - 120.0% of mass 95	70.28	( )	
175	5.0 - 9.0% of mass 174	5.23	( 7.45 )	1
176	95.0 - 101.0% of mass 174	67.79	( 96.47 )	1
177	5.0 - 9.0% of mass 176	4.52	( 6.68 )	2

1- Value is % mass 174

2- Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	<i>SAMPLE NO.</i>	<i>LAB SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1.	V5STD001	1207	2110107p/k9758	01/07/11	1808
2.	V5STD005	1201	2110107p/k9759	01/07/11	1830
3.	V5STD010	1206	2110107p/k9760	01/07/11	1854
4.	V5STD020	1202	2110107p/k9761	01/07/11	1916
5.	V5STD050	1203	2110107p/k9762	01/07/11	1938
6.	V5STD100	1204	2110107p/k9763	01/07/11	2001
7.	V5STD200	1205	2110107p/k9764	01/07/11	2023
8.	8260ICV	1600	2110107p/k9766	01/07/11	2107

5A  
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Lab File ID: 2110118p/k9903 BFB Injection Date: 01/18/11  
 Instrument ID: MSV5 BFB Injection Time: 1233  
 GC Column: RTX-VMS-30 ID: .25 (mm)  
 Analytical Batch: 449157

<i>m/e</i>	<i>ION ABUNDANCE CRITERIA</i>	<i>% Relative Abundance</i>
50	15.0 - 40.0% of mass 95	20.55 ( )
75	30.0 - 60.0% of mass 95	49.57 ( )
95	Base Peak, 100% relative abundance	100 ( )
96	5.0 -9.0% of mass 95	6.7 ( )
173	Less than 2.0% of mass 174	0 ( 0 ) 1
174	50.0 - 120.0% of mass 95	66.86 ( )
175	5.0 - 9.0% of mass 174	4.76 ( 7.12 ) 1
176	95.0 - 101.0% of mass 174	64.27 ( 96.13 ) 1
177	5.0 - 9.0% of mass 176	4.62 ( 7.2 ) 2

1- Value is % mass 174

2- Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	<i>SAMPLE NO.</i>	<i>LAB SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1.	V5STD050	1400	2110118p/k9905	01/18/11	1319
2.	LCS913706	913706	2110118p/k9905	01/18/11	1319
3.	LCSD913707	913707	2110118p/k9906	01/18/11	1342
4.	APP9050	1400	2110118p/k9907	01/18/11	1409
5.	MB913705	913705	2110118p/k9909	01/18/11	1455
6.	T-2-WEST	21101140506	2110118p/k9911	01/18/11	1541

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2011 11:09  
 End Cal Date : 15-JAN-2011 13:06  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv11.i/2110115.s.b/8260bw11.m  
 Cal Date : 17-Jan-2011 11:24 rjo

## Calibration File Names:

Level 1: /var/chem/msv11.i/2110115.s.b/a8933.d  
 Level 2: /var/chem/msv11.i/2110115.s.b/a8935.d  
 Level 3: /var/chem/msv11.i/2110115.s.b/a8936.d  
 Level 4: /var/chem/msv11.i/2110115.s.b/a8937.d  
 Level 5: /var/chem/msv11.i/2110115.s.b/a8938.d  
 Level 6: /var/chem/msv11.i/2110115.s.b/a8934.d  
 Level 8: /var/chem/msv11.i/2110115.s.b/a8941.d

Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
1 Dichlorodifluoromethane	6632  2135	27120	75492	150506	320108	13376	LINR	0.00409	0.27251		0.99984
2 Chloromethane ++	7252  2266	28540	75385	150507	328124	14821	LINR	0.00438	0.27788		0.99964
3 Vinyl Chloride +	0.36512  0.49409	0.36486	0.39431	0.37207	0.36690	0.37712	AVRG		0.39064		11.97194
4 1-3 Butadiene	7133  2203	29449	69780	152023	279568	15201	LINR	-0.04410	0.26232		0.99694

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2011 11:09  
 End Cal Date : 15-JAN-2011 13:06  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv11.i/2110115.s.b/8260bw11.m  
 Cal Date : 17-Jan-2011 11:24 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
5 Bromomethane	6063 2299	25166	70090	142408	299026	12322	LINR	0.00385	0.25505		0.99988
6 Chloroethane	0.17453 0.22168	0.18338	0.19858	0.20153	0.23264	0.17687	AVRG		0.19846		11.23610
9 Trichlorofluoromethane	9289 2913	37439	106022	214118	451394	18529	LINR	0.00626	0.38506		0.99986
12 Ethyl Ether	0.21450 0.28899	0.22668	0.23547	0.25489	0.25358	0.20294	AVRG		0.23958		12.08100
7 2-Chloropropene	++++ ++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00 <-
13 1,1-Dichloroethene +	5369 1748	23008	64193	129632	277078	11291	LINR	0.01176	0.23607		0.99986
21 Carbon Disulfide	16063 7384	67943	188229	382797	838473	33280	LINR	0.02059	0.71239		0.99953

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2011 11:09  
 End Cal Date : 15-JAN-2011 13:06  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv11.i/2110115.s.b/8260bw11.m  
 Cal Date : 17-Jan-2011 11:24 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
19 1,1,2Trichlorotrifluoroethane	5671 1890	22682	66171	135080	282527	11407	LINR	0.00908	0.24153		0.99981
14 Methyl Iodide	0.26231 0.37607	0.28128	0.31986	0.32299	0.32847	0.26604	AVRG		0.30814		13.23544
156 Ethanol	++++ ++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00 <-
8 Acrolein	0.01153 0.01222	0.01257	0.01344	0.01294	0.01349	0.01360	AVRG		0.01283		5.98524
17 Allyl chloride	0.26253 0.35272	0.27219	0.28914	0.30097	0.30583	0.24939	AVRG		0.29040		11.78337
18 Methylene Chloride	0.35520 0.47118	0.33235	0.34073	0.33185	0.33994	0.34634	AVRG		0.35966		13.85566
11 Acetone	0.11492 ++++	0.10603	0.10204	0.09501	0.09503	0.11537	AVRG		0.10473		8.69285

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2011 11:09  
 End Cal Date : 15-JAN-2011 13:06  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv11.i/2110115.s.b/8260bw11.m  
 Cal Date : 17-Jan-2011 11:24 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
22 trans-1,2-Dichloroethene	7976 2877	34787	96137	198781	428700	16818	LINR	0.02150	0.36531		0.99979
20 Methyl Acetate	0.18210 0.20476	0.18729	0.19358	0.18385	0.18873	0.19440	AVRG		0.19067		4.04096
32 Hexane	11193 3700	46032	144484	288600	605137	23216	LINR	0.01466	0.51846		0.99956
25 MTBE	18500 5070	81168	211589	427023	936547	38043	LINR	0.01651	0.79495		0.99960
15 tert-Butyl Alcohol	338 ++++	2279	5743	13324	++++	719	LINR	0.07609	0.02613		0.99788
10 Acetonitrile	0.03002 0.03705	0.03451	0.03595	0.03711	0.03105	0.02689	AVRG		0.03322		11.91000
28 Isopropyl Ether	0.79258 1.05658	0.80344	0.76627	0.84913	0.84086	0.80895	AVRG		0.84540		11.50611

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2011 11:09  
 End Cal Date : 15-JAN-2011 13:06  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv11.i/2110115.s.b/8260bw11.m  
 Cal Date : 17-Jan-2011 11:24 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
27 Chloroprene	0.31740	0.35696	0.37558	0.40068	0.40826	0.31689					
	0.39156						AVRG		0.36676		10.31359
26 1,1-Dichloroethane ++	11502	47672	128702	262335	563110	23764					
	3501						LINR	0.01045	0.47895		0.99987
16 Acrylonitrile	0.07367	0.08097	0.07852	0.07593	0.07785	0.08031					
	0.06845						AVRG		0.07653		5.68394
29 Vinyl Acetate	0.29855	0.31040	0.36573	0.35754	0.33874	0.31717					
	0.30915						AVRG		0.32818		7.92723
152 Ethyl Tert-butyl Ether	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+00		0.000e+00 <-
23 cis-1,2-Dichloroethene	8572	35047	96174	197947	424658	17256					
	2828						LINR	0.01506	0.36159		0.99986
38 2,2-Dichloropropane	0.36358	0.36191	0.41672	0.40781	0.38787	0.35544					
	0.51282						AVRG		0.40088		13.65316

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2011 11:09  
 End Cal Date : 15-JAN-2011 13:06  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv11.i/2110115.s.b/8260bw11.m  
 Cal Date : 17-Jan-2011 11:24 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
45 Cyclohexane	0.38330	0.40069	0.46899	0.46458	0.47101	0.39743					
	0.54792						AVRG		0.44770		12.96351
36 Bromochloromethane	0.13202	0.13686	0.14473	0.14149	0.14168	0.13767					
	0.18694						AVRG		0.14591		12.71579
37 Chloroform +	11589	47806	129435	261511	562980	23935					
	3434						LINR	0.00938	0.47855		0.99983
46 Carbon Tetrachloride	0.29555	0.30694	0.33541	0.33513	0.33217	0.31059					
	0.42390						AVRG		0.33424		12.72028
53 Ethyl Acetate	29132	141558	389852	863012	1468809	54243					
	8127						QUAD	0.37272	2.32735	0.22946	0.99759
35 Tetrahydrofuran	11051	55377	145660	323623	+++++	21017					
	2955						LINR	0.20313	0.12474		0.99853
31 sec-butanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00 <-

GCAL, Inc.

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
43 1,1,1-Trichloroethane	0.37634	0.38388	0.42014	0.41248	0.41418	0.37687					
	0.51137						AVRG		0.41361		11.35041
33 2-Butanone	3350	15101	37983	75062	156217	7370					
	1300						LINR	-0.02223	0.13263		0.99979
44 1,1-Dichloropropene	8566	35278	101699	208603	437528	17000					
	2755						LINR	0.01267	0.37417		0.99984
157 1,3-difluorobenzene	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+00		0.000e+00 <-
54 2,2,4 Trimethylpentane	0.73202	0.76305	0.71070	0.79440	0.79709	0.75954					
	0.95421						AVRG		0.78729		10.14641
47 Benzene	27348	113415	307679	628022	1342076	55442					
	8434						LINR	0.01039	1.14249		0.99990
24 Propionitrile	0.03168	0.04026	0.04300	0.04676	0.03775	0.03132					
	0.03979						AVRG		0.03865		14.63160

GCAL, Inc.

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
30 Methylacrylonitrile	0.15169	0.17150	0.16244	0.18794	0.16077	0.14452					
	0.19060						AVRG		0.16707		10.41125
42 1,2-Dichloroethane	0.35705	0.36025	0.37797	0.36110	0.37115	0.36211					
	0.47536						AVRG		0.38071		11.12663
34 Isobutyl Alcohol	746	5218	15156	35222	+++++	1563					
	+++++						LINR	0.49587	0.01398		0.99820 <-
158 1,4-difluorobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00 <-
M 80 Total 1,2-Dichloroethene	16548	69834	192311	396728	853358	34074					
	5705						LINR	0.03659	0.36345		0.99983
154 Tert-butyl formate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00 <-
153 tert-amyl Methyl Ether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00 <-

GCAL, Inc.

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
155 Tert-amyl alcohol	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+00		0.000e+00 <-
61 Methyl Cyclohexane	9561  3471	40693	124375	254927	534187	19475					
							LINR	0.02035	0.45805		0.99969
57 Trichloroethene	6734  2224	29020	78877	162017	347708	14104					
							LINR	0.01519	0.29610		0.99987
162 Heptane	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+00		0.000e+00 <-
159 1,2-difluorobenzene	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+00		0.000e+00 <-
M 161 Total Difluorobenzene	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+00		0.000e+00 <-
40 n-Butanol	348  ++++	3105	10214	24887	++++	873					
							LINR	0.13029	0.04999		0.99643 <-

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
55 Dibromomethane	0.15466	0.16232	0.16922	0.16432	0.16708	0.16269					
	0.20949						AVRG		0.16997		10.60351
48 2-3 Dichloro-1-Propene	9496	36960	90184	208968	426103	19289					
	2700						LINR	0.02104	0.39676		0.99929
56 1,2-Dichloropropane +	6860	28447	76550	156912	332715	13469					
	1939						LINR	0.00893	0.28355		0.99995
58 Bromodichloromethane	0.32872	0.35243	0.37088	0.37002	0.37805	0.34670					
	0.45045						AVRG		0.37103		10.48745
52 Methyl methacrylate	4628	23320	65509	150163	272869	9050					
	1415						LINR	0.00997	0.26085		0.99533
51 1,4- Dioxane	721	5216	15165	32502	+++++	1753					
	76.00000						LINR	1.45160	0.00255		0.99889 <-
160 Methyl disulfide	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00 <-

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
60 1-Bromo-2-chloroethane	954	4422	12118	23929	51892	2226					
	119						LINR	0.01353	0.04415		0.99971
62 2-Chloroethyl vinyl ether	330	2368	7638	15622	38805	1090					
	++++						LINR	0.13305	0.03344		0.99520 <-
63 cis-1,3-Dichloropropene	0.39098	0.41084	0.46031	0.45456	0.46134	0.40299					
	0.56538						AVRG		0.44948		13.09657
70 Toluene +	29535	119684	331362	680745	1444836	60101					
	9950						LINR	-0.01810	2.96048		0.99964
49 2-Nitropropane	0.06362	0.07276	0.07390	0.09117	0.07769	0.06184					
	0.07807						AVRG		0.07415		13.28306
78 Tetrachloroethene	0.52324	0.52189	0.58549	0.55629	0.53909	0.54724					
	0.73893						AVRG		0.57317		13.30029
65 4-methyl-2-pentanone	5922	27698	75582	152031	324557	13332					
	1445						LINR	0.01141	0.27666		0.99988

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
66 trans-1,3-Dichloropropene	0.36235	0.38743	0.42347	0.42249	0.43255	0.37306					
	0.52591						AVRG		0.41818		13.08258
67 1,1,2-Trichloroethane	0.62611	0.63091	0.65371	0.60513	0.59722	0.64654					
	0.85682						AVRG		0.65949		13.54886
64 Ethyl Methacrylate	4177	20854	62846	145078	276447	7995					
	1017						LINR	0.03395	0.69987		0.99654
72 Dibromochloromethane	0.63559	0.68591	0.71506	0.68645	0.68575	0.68588					
	0.90534						AVRG		0.71428		12.24478
71 1,3-Dichloropropane	1.07479	1.08744	1.13386	1.06172	1.04442	1.10017					
	1.52055						AVRG		1.14614		14.61941
59 1-Nitropropane	784	4079	10754	27917	48567	1494					
	58.00000						LINR	0.02796	0.04711		0.99103
74 1,2-Dibromoethane (EDB)	0.59617	0.63301	0.65649	0.61513	0.61187	0.63175					
	0.85828						AVRG		0.65753		13.77388

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
73 2-Hexanone	3625	18571	52944	105093	226773	9075					
	873						LINR	-0.00738	0.46537		0.99937
M 87 1-3 Dichloropropene total	0.37667	0.39913	0.44189	0.43852	0.44694	0.38802					
	0.54564						AVRG		0.43383		13.08376
151 3,3 Dimethyl-1-butanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00<-
86 1-Chlorohexane	7609	32328	96166	190186	430461	15939					
	2758						LINR	0.03823	0.36579		0.99875
85 Chlorobenzene ++	17751	75128	206145	420280	903947	36618					
	6025						LINR	-0.01346	1.84993		0.99972
88 Ethylbenzene +	0.96876	0.98536	1.09078	1.03839	1.02889	0.97403					
	1.35365						AVRG		1.06284		12.73030
82 1,1,1,2-Tetrachloroethane	5985	24828	69265	142187	305394	12246					
	1822						LINR	-0.00970	0.62571		0.99974

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
69 3-ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00 <-
89 p,m-Xylene	21806	95276	277953	578442	1253286	46394					
	6849						LINR	0.01317	1.28708		0.99979
75 2-ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00 <-
93 o-Xylene	9725	44453	129828	271667	594355	20889					
	2914						LINR	0.01522	1.22119		0.99982
90 Bromoform ++	0.39999	0.45621	0.49212	0.47137	0.48996	0.45500					
	0.48275						AVRG		0.46392		6.87842
91 Styrene	1.59569	1.84701	2.13433	2.09260	2.18495	1.74610					
	2.17360						AVRG		1.96775		12.00854
96 Isopropylbenzene	24426	110769	333207	702994	1547602	51923					
	7760						LINR	0.02370	3.18263		0.99978

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
98 Bromobenzene	10789	45976	129658	274449	619321	22113					
	3496						LINR	-0.00051	1.25746		0.99992
100 n-Propylbenzene	29253	126463	387176	822094	1824439	60888					
	9955						LINR	0.00545	3.72447		0.99976
M 120 TOTAL XYLENE	31531	139729	407781	850109	1847641	67283					
	9763						LINR	-0.04415	1.25675		0.99947
92 1,1,2,2-Tetrachloroethane++	7115	30607	84158	173184	374076	15403					
	2104						LINR	-0.03392	0.76044		0.99935
101 2-Chlorotoluene	18026	77122	226790	480444	1070747	37086					
	5967						LINR	0.00063	2.18072		0.99986
94 1,2,3-Trichloropropane	0.70399	0.72073	0.72851	0.67516	0.66804	0.73853					
	0.94696						AVRG		0.74027		12.81703
104 1,3,5-Trimethylbenzene	20271	90976	274001	576030	1296134	42160					
	6548						LINR	0.00889	2.64191		0.99981

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
76 Cyclohexanone	2026 398	10959	34739	85067	++++	3366	LINR	0.18691	0.22488		0.99164
95 trans-1,4-Dichloro-2-Butene	1824 426	8503	24357	49668	112211	4090	LINR	-0.00454	0.22792		0.99970
102 4-Chlorotoluene	18631 6334	81136	243216	512022	1138602	38752	LINR	0.00125	2.32119		0.99978
105 tert-butylbenzene	10789 3598	47197	144525	309726	697127	22519	LINR	0.01489	1.42226		0.99984
84 Pentachloroethane	0.42332 0.51764	0.43643	0.43648	0.44831	0.46707	0.41428	AVRG		0.44908		7.72334
106 1,2,4-Trimethylbenzene	20494 6542	93813	279347	598405	1344074	43496	LINR	0.01254	2.74167		0.99988
103 2-methylnapthalene	++++ ++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00<-

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
107 sec-Butylbenzene	24040	107457	334927	710294	1588171	50544					
	8028						LINR	0.01266	3.24423		0.99976
112 Dicyclopentadiene	2.64696	2.82058	2.79119	3.17904	3.30961	2.80036					
	3.53678						AVRG		3.01207		10.97197
111 p-Isopropyltoluene	18977	87368	273105	582745	1313306	40564					
	6334						LINR	0.01930	2.68294		0.99979
108 1,3-Dichlorobenzene	12514	53226	154679	330522	751785	25685					
	4258						LINR	0.00973	1.52795		0.99988
110 1,4-Dichlorobenzene	13300	55483	162609	342276	776923	27151					
	4928						LINR	0.00382	1.57776		0.99985
114 n-Butylbenzene	16516	76611	247422	531501	1182211	34913					
	5995						LINR	0.02045	2.42246		0.99966
113 1,2-Dichlorobenzene	12069	51713	147983	313706	711889	24808					
	3893						LINR	0.00490	1.44596		0.99990

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
81 1-3 Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00 <-
79 1-4 Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00 <-
77 1-2 Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00 <-
115 1,2-Dibromo-3-Chloropropane	1159	5860	16676	34306	76582	2924					
	402						LINR	-0.00993	0.15564		0.99971
99 Benzal Chloride	717	4569	16268	46630	149225	1335					
	99.00000						QUAD	0.20510	9.23124	-2.70903	0.99778
118 Hexachlorobutadiene	2264	8516	26156	55607	122736	4502					
	1024						LINR	-0.00661	0.24984		0.99972
116 1,2,4-Trichlorobenzene	5809	25410	76850	162523	360293	11999					
	1806						LINR	0.00376	0.73548		0.99976

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 8										
117 Naphthalene	11430 2219	59507	181183	391784	867431	25361	LINR	0.02048	1.77932		0.99977
119 1,2,3-Trichlorobenzene	4641 1508	21199	59844	124973	274027	9999	LINR	-0.01415	0.55808		0.99967
M 121 Total Diethylbenzene	++++ ++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00<-
\$ 39 Dibromofluoromethane	0.24299 0.24238	0.23833	0.23915	0.24011	0.24595	0.23817	AVRG		0.24101		1.19430
\$ 41 1,2-Dichloroethane-d4	0.14839 0.15059	0.14889	0.14773	0.14792	0.14921	0.14828	AVRG		0.14872		0.65456
\$ 68 Toluene-d8	2.50576 2.55249	2.48892	2.49139	2.40998	2.34254	2.54110	AVRG		2.47603		3.01994
\$ 97 Bromofluorobenzene	0.71398 0.68270	0.71888	0.73743	0.72751	0.72272	0.72648	AVRG		0.71853		2.42608

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 14-JAN-2011 11:09  
End Cal Date : 15-JAN-2011 13:06  
Quant Method : ISTD  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /var/chem/msv11.i/2110115.s.b/8260bw11.m  
Cal Date : 17-Jan-2011 11:24 rjo

Average %RSD Results.
=====
Calculated Average %RSD = 10.48843
Maximun Average %RSD = 15.00000
* Passed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

GCAL, Inc.

RECOVERY REPORT

Client Name: Client SDG: 2110114.s  
 Sample Matrix: LIQUID Fraction: VOA  
 Lab Smp Id: 1600 Client Smp ID: V11ICV  
 Level: LOW Operator: RJU  
 Data Type: MS DATA SampleType: LCS  
 SpikeList File: App9.spk Quant Type: ISTD  
 Sublist File: APP9\$.sub  
 Method File: /var/chem/msv11.i/2110114.s.b/8260bw11.m  
 Misc Info: MSV~20844~\*1\*RJU

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
4 1-3 Butadiene	50.0	38.9	77.86	60-140
12 Ethyl Ether	250	221	88.22	60-140
17 Allyl chloride	50.0	45.0	90.03	60-140
10 Acetonitrile	250	210	83.99	60-140
15 tert-Butyl Alcohol	50.0	32.4	64.73	60-140
28 Isopropyl Ether	50.0	44.4	88.78	60-140
31 sec-butanol	50.0	0.00	NT*	60-140
27 Chloroprene	50.0	45.5	91.01	60-140
53 Ethyl Acetate	250	162	64.93	60-140
24 Propionitrile	250	212	84.71	60-140
35 Tetrahydrofuran	250	164	65.44	60-140
30 Methylacrylonitrile	50.0	42.3	84.59	60-140
34 Isobutyl Alcohol	250	155	61.86	60-140
54 2,2,4 Trimethylpentane	50.0	41.0	82.07	60-140
40 n-Butanol	50.0	31.2	62.40	60-140
48 2-3 Dichloro-1-Propene	50.0	47.3	94.52	60-140
52 Methyl methacrylate	50.0	40.1	80.14	60-140
51 1,4- Dioxane	1250	843	67.48	60-140
49 2-Nitropropane	50.0	40.6	81.12	60-140
64 Ethyl Methacrylate	50.0	41.9	83.80	60-140
59 1-Nitropropane	50.0	39.7	79.46	60-140
76 Cyclohexanone	100	61.1	61.07	60-140
84 Pentachloroethane	50.0	46.8	93.54	60-140
112 Dicyclopentadiene	50.0	45.6	91.20	60-140
99 Benzal Chloride	100	77.9	77.91	60-140

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 39 Dibromofluoromethane	50.0	49.9	99.72	77-127

GCAL, Inc.

RECOVERY REPORT

Client Name: Client SDG: 2110115.s  
 Sample Matrix: LIQUID Fraction: VOA  
 Lab Smp Id: 1600 Client Smp ID: V11ICV  
 Level: LOW Operator: RJU  
 Data Type: MS DATA SampleType: LCS  
 SpikeList File: ICV.spk Quant Type: ISTD  
 Sublist File: 8260b.sub  
 Method File: /var/chem/msv11.i/2110115.s.b/8260bw11.m  
 Misc Info: MSV~20858~\*1\*RJU

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 Dichlorodifluoromethane	50.0	58.7	117.38	60-140
2 Chloromethane ++	50.0	53.6	107.22	70-130
3 Vinyl Chloride +	50.0	46.8	93.53	70-130
5 Bromomethane	50.0	51.4	102.78	60-140
6 Chloroethane	50.0	48.9	97.84	70-130
9 Trichlorofluoromethane	50.0	51.4	102.90	70-130
19 1,1,2Trichlotrifluoroethane	50.0	48.6	97.11	70-130
8 Acrolein	250	215	85.97	60-140
13 1,1-Dichloroethene +	50.0	48.4	96.80	70-130
11 Acetone	50.0	69.4	138.85	60-140
14 Methyl Iodide	50.0	54.9	109.73	70-130
21 Carbon Disulfide	50.0	52.4	104.88	70-130
18 Methylene Chloride	50.0	48.2	96.32	70-130
25 MTBE	50.0	51.4	102.89	70-130
22 trans-1,2-Dichloroethene	50.0	49.5	99.09	70-130
16 Acrylonitrile	250	264	105.70	60-140
26 1,1-Dichloroethane ++	50.0	50.0	100.02	70-130
29 Vinyl Acetate	50.0	52.8	105.70	70-130
38 2,2-Dichloropropane	50.0	49.4	98.83	70-130
23 cis-1,2-Dichloroethene	50.0	50.3	100.52	70-130
33 2-Butanone	50.0	60.4	120.80	60-140
36 Bromochloromethane	50.0	49.8	99.63	70-130
37 Chloroform +	50.0	49.8	99.60	70-130
45 Cyclohexane	50.0	48.5	96.93	70-130
43 1,1,1-Trichloroethane	50.0	48.1	96.14	70-130
46 Carbon Tetrachloride	50.0	48.8	97.68	70-130
44 1,1-Dichloropropene	50.0	48.8	97.61	70-130
47 Benzene	50.0	49.5	98.99	70-130
42 1,2-Dichloroethane	50.0	50.5	100.96	70-130
57 Trichloroethene	50.0	48.8	97.63	70-130
61 Methyl Cyclohexane	50.0	50.6	101.21	70-130
56 1,2-Dichloropropane +	50.0	50.4	100.78	70-130
55 Dibromomethane	50.0	50.8	101.55	70-130

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
58 Bromodichloromethane	50.0	49.7	99.38	70-130
62 2-Chloroethyl vinyl ether	50.0	48.1	96.20	60-140
63 cis-1,3-Dichloropropene	50.0	49.7	99.46	70-130
65 4-methyl-2-pentanone	50.0	48.9	97.80	60-140
70 Toluene +	50.0	50.2	100.32	70-130
66 trans-1,3-Dichloropropene	50.0	51.9	103.74	70-130
67 1,1,2-Trichloroethane	50.0	47.9	95.76	70-130
78 Tetrachloroethene	50.0	48.3	96.52	70-130
71 1,3-Dichloropropane	50.0	48.8	97.70	70-130
73 2-Hexanone	50.0	56.2	112.45	60-140
72 Dibromochloromethane	50.0	48.2	96.38	70-130
74 1,2-Dibromoethane (EDB)	50.0	48.2	96.33	70-130
85 Chlorobenzene ++	50.0	50.8	101.52	70-130
88 Ethylbenzene +	50.0	48.2	96.33	70-130
82 1,1,1,2-Tetrachloroethane	50.0	50.8	101.60	70-130
89 p,m-Xylene	100	98.5	98.54	70-130
93 o-Xylene	50.0	50.0	99.98	70-130
91 Styrene	50.0	51.8	103.63	70-130
90 Bromoform ++	50.0	51.3	102.66	70-130
96 Isopropylbenzene	50.0	48.4	96.78	70-130
98 Bromobenzene	50.0	50.6	101.28	70-130
92 1,1,2,2-Tetrachloroethane++	50.0	51.4	102.74	70-130
100 n-Propylbenzene	50.0	50.3	100.67	70-130
94 1,2,3-Trichloropropane	50.0	47.3	94.62	70-130
95 trans-1,4-Dichloro-2-Butene	50.0	53.2	106.40	60-140
101 2-Chlorotoluene	50.0	50.3	100.60	70-130
104 1,3,5-Trimethylbenzene	50.0	50.3	100.66	70-130
102 4-Chlorotoluene	50.0	50.0	100.09	70-130
105 tert-butylbenzene	50.0	49.5	98.96	70-130
106 1,2,4-Trimethylbenzene	50.0	51.0	102.01	70-130
107 sec-Butylbenzene	50.0	50.3	100.60	70-130
108 1,3-Dichlorobenzene	50.0	50.1	100.12	70-130
111 p-Isopropyltoluene	50.0	52.4	104.81	70-130
110 1,4-Dichlorobenzene	50.0	50.5	100.96	70-130
114 n-Butylbenzene	50.0	51.0	101.92	70-130
113 1,2-Dichlorobenzene	50.0	49.8	99.53	70-130
115 1,2-Dibromo-3-Chloropropane	50.0	50.2	100.45	60-140
116 1,2,4-Trichlorobenzene	50.0	55.7	111.45	70-130
118 Hexachlorobutadiene	50.0	54.9	109.81	70-130
117 Naphthalene	50.0	50.8	101.64	70-130
119 1,2,3-Trichlorobenzene	50.0	55.0	110.09	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 39 Dibromofluoromethane	50.0	50.4	100.89	77-127

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv11.i Injection Date: 16-JAN-2011 08:59  
 Lab File ID: a8959.d Init. Cal. Date(s): 14-JAN-2011 15-JAN-2011  
 Analysis Type: WATER Init. Cal. Times: 11:09 13:06  
 Lab Sample ID: 1400 Quant Type: ISTD  
 Method: /var/chem/msv11.i/2110116.s.b/8260bw11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 1-3 Butadiene	55.51012	50.00000	0.30280	0.010	11.02024	40.00000	Linear
12 Ethyl Ether	0.23958	0.23233	0.23233	0.010	-3.02595	40.00000	Averaged
17 Allyl chloride	0.29040	0.29125	0.29125	0.010	0.29431	40.00000	Averaged
15 tert-Butyl Alcohol	45.83782	50.00000	0.02196	0.010	-8.32436	40.00000	Linear
10 Acetonitrile	0.03322	0.03320	0.03320	0.010	-0.06665	40.00000	Averaged
28 Isopropyl Ether	0.84540	0.83323	0.83323	0.010	-1.43920	40.00000	Averaged
27 Chloroprene	0.36676	0.38048	0.38048	0.010	3.74008	40.00000	Averaged
31 sec-butanol	++++	0.21068	0.21068	0.010	++++	40.00000	Averaged
53 Ethyl Acetate	206	250	0.28241	0.010	-17.66793	40.00000	Quadratic
35 Tetrahydrofuran	225	250	0.10729	0.010	-9.92414	40.00000	Linear
54 2,2,4 Trimethylpentane	0.78729	0.78622	0.78622	0.010	-0.13576	40.00000	Averaged
24 Propionitrile	0.03865	0.03968	0.03968	0.010	2.65152	40.00000	Averaged
30 Methylacrylonitrile	0.16707	0.16597	0.16597	0.010	-0.65440	40.00000	Averaged
34 Isobutyl Alcohol	222	250	0.01115	0.010	-11.31290	40.00000	Linear
40 n-Butanol	44.29366	50.00000	0.03777	0.010	-11.41268	40.00000	Linear
48 2-3 Dichloro-1-Propene	50.16647	50.00000	0.38974	0.010	0.33294	30.00000	Linear
52 Methyl methacrylate	48.45581	50.00000	0.25019	0.010	-3.08838	40.00000	Linear
51 1,4- Dioxane	1146	1250	0.00219	0.010	-8.30536	40.00000	Linear
49 2-Nitropropane	0.07415	0.07719	0.07719	0.010	4.09757	40.00000	Averaged
64 Ethyl Methacrylate	47.25174	50.00000	0.63764	0.010	-5.49651	40.00000	Linear
59 1-Nitropropane	49.39889	50.00000	0.04523	0.010	-1.20222	40.00000	Linear
76 Cyclohexanone	79.45419	100	0.15766	0.010	-20.54581	40.00000	Linear
84 Pentachloroethane	0.44908	0.43308	0.43308	0.010	-3.56159	40.00000	Averaged
112 Dicyclopentadiene	3.01207	3.04347	3.04347	0.010	1.04233	40.00000	Averaged
99 Benzal Chloride	101	100	0.10491	0.010	1.13409	40.00000	Quadratic

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv11.i Injection Date: 16-JAN-2011 09:23  
 Lab File ID: a8960.d Init. Cal. Date(s): 14-JAN-2011 15-JAN-2011  
 Analysis Type: WATER Init. Cal. Times: 11:09 13:06  
 Lab Sample ID: 1400 Quant Type: ISTD  
 Method: /var/chem/msv11.i/2110116.s.b/8260bw11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Dichlorodifluoromethane	44.13244	50.00000	0.23942	0.010	-11.73512	40.00000	Linear
2 Chloromethane ++	44.53628	50.00000	0.24629	0.100	-10.92744	30.00000	Linear
3 Vinyl Chloride +	0.39064	0.35754	0.35754	0.010	-8.47177	20.00000	Averaged
5 Bromomethane	45.44299	50.00000	0.23083	0.010	-9.11402	40.00000	Linear
6 Chloroethane	0.19846	0.18568	0.18568	0.010	-6.43782	30.00000	Averaged
9 Trichlorofluoromethane	46.31518	50.00000	0.35428	0.010	-7.36965	30.00000	Linear
13 1,1-Dichloroethene +	46.42956	50.00000	0.21643	0.010	-7.14088	20.00000	Linear
21 Carbon Disulfide	45.30857	50.00000	0.63087	0.010	-9.38285	30.00000	Linear
19 1,1,2-Trichlorotrifluoroethane	47.29173	50.00000	0.22626	0.010	-5.41653	30.00000	Linear
14 Methyl Iodide	0.30814	0.28971	0.28971	0.010	-5.98149	30.00000	Averaged
8 Acrolein	0.01283	0.01594	0.01594	0.010	24.22432	40.00000	Averaged
18 Methylene Chloride	0.35966	0.31829	0.31829	0.010	-11.50132	30.00000	Averaged
11 Acetone	0.10473	0.11918	0.11918	0.010	13.79150	40.00000	Averaged
22 trans-1,2-Dichloroethene	45.84145	50.00000	0.32707	0.010	-8.31710	30.00000	Linear
20 Methyl Acetate	0.19067	0.19657	0.19657	0.010	3.09376	30.00000	Averaged
32 Hexane	48.04499	50.00000	0.49058	0.010	-3.91003	30.00000	Linear
25 MTBE	47.41446	50.00000	0.74072	0.010	-5.17108	30.00000	Linear
26 1,1-Dichloroethane ++	47.23153	50.00000	0.44742	0.100	-5.53693	30.00000	Linear
16 Acrylonitrile	0.07653	0.07889	0.07889	0.010	3.08244	40.00000	Averaged
29 Vinyl Acetate	0.32818	0.35357	0.35357	0.010	7.73441	40.00000	Averaged
23 cis-1,2-Dichloroethene	46.50745	50.00000	0.33089	0.010	-6.98509	30.00000	Linear
38 2,2-Dichloropropane	0.40088	0.37956	0.37956	0.010	-5.31845	30.00000	Averaged
36 Bromochloromethane	0.14591	0.13394	0.13394	0.010	-8.20310	30.00000	Averaged
45 Cyclohexane	0.44770	0.43342	0.43342	0.010	-3.19049	30.00000	Averaged
37 Chloroform +	47.32555	50.00000	0.44847	0.010	-5.34891	20.00000	Linear
46 Carbon Tetrachloride	0.33424	0.31463	0.31463	0.010	-5.86808	30.00000	Averaged
\$ 39 Dibromofluoromethane	0.24071	0.23985	0.23985	0.010	-0.35640	30.00000	Averaged
43 1,1,1-Trichloroethane	0.41361	0.38300	0.38300	0.010	-7.39958	30.00000	Averaged
33 2-Butanone	55.97830	50.00000	0.15144	0.010	11.95661	40.00000	Linear
44 1,1-Dichloropropene	46.94601	50.00000	0.34658	0.010	-6.10798	30.00000	Linear
47 Benzene	46.65854	50.00000	1.05427	0.010	-6.68292	30.00000	Linear
\$ 41 1,2-Dichloroethane-d4	0.15419	0.14776	0.14776	0.010	-4.16793	30.00000	Averaged
42 1,2-Dichloroethane	0.38071	0.35438	0.35438	0.010	-6.91701	30.00000	Averaged
61 Methyl Cyclohexane	47.33421	50.00000	0.42431	0.010	-5.33158	30.00000	Linear
57 Trichloroethene	45.65246	50.00000	0.26586	0.010	-8.69509	30.00000	Linear

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv11.i Injection Date: 16-JAN-2011 09:23  
Lab File ID: a8960.d Init. Cal. Date(s): 14-JAN-2011 15-JAN-2011  
Analysis Type: WATER Init. Cal. Times: 11:09 13:06  
Lab Sample ID: 1400 Quant Type: ISTD  
Method: /var/chem/msv11.i/2110116.s.b/8260bw11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
55 Dibromomethane	0.16997	0.15794	0.15794	0.010	-7.07593	30.00000	Averaged
56 1,2-Dichloropropane +	46.98319	50.00000	0.26391	0.010	-6.03361	20.00000	Linear
58 Bromodichloromethane	0.37103	0.35145	0.35145	0.010	-5.27794	30.00000	Averaged
M 80 Total 1,2-Dichloroethene	92.34890	100	0.32898	0.010	-7.65110	30.00000	Linear
60 1-Bromo-2-chloroethane	47.66821	50.00000	0.04150	0.001	-4.66357	30.00000	Linear
62 2-Chloroethyl vinyl ether	42.17605	50.00000	0.02376	0.010	-15.64791	40.00000	Linear
63 cis-1,3-Dichloropropene	0.44948	0.43032	0.43032	0.010	-4.26415	30.00000	Averaged
\$ 68 Toluene-d8	2.54436	2.46702	2.46702	0.010	-3.03987	30.00000	Averaged
70 Toluene +	48.40308	50.00000	2.91952	0.010	-3.19385	20.00000	Linear
65 4-methyl-2-pentanone	52.85553	50.00000	0.28930	0.010	5.71105	40.00000	Linear
78 Tetrachloroethene	0.57317	0.53954	0.53954	0.010	-5.86643	30.00000	Averaged
66 trans-1,3-Dichloropropene	0.41818	0.40342	0.40342	0.010	-3.53014	30.00000	Averaged
67 1,1,2-Trichloroethane	0.65949	0.61840	0.61840	0.010	-6.23166	30.00000	Averaged
72 Dibromochloromethane	0.71428	0.69628	0.69628	0.010	-2.52018	30.00000	Averaged
71 1,3-Dichloropropane	1.14614	1.07263	1.07263	0.010	-6.41324	30.00000	Averaged
74 1,2-Dibromoethane (EDB)	0.65753	0.61516	0.61516	0.010	-6.44369	30.00000	Averaged
73 2-Hexanone	60.53416	50.00000	0.56685	0.010	21.06833	40.00000	Linear
86 1-Chlorohexane	45.27241	50.00000	0.31722	0.010	-9.45518	30.00000	Linear
85 Chlorobenzene ++	48.78353	50.00000	1.82982	0.300	-2.43295	30.00000	Linear
88 Ethylbenzene +	1.06284	1.00941	1.00941	0.010	-5.02668	20.00000	Averaged
82 1,1,1,2-Tetrachloroethane	48.92515	50.00000	0.61833	0.010	-2.14970	30.00000	Linear
89 p,m-Xylene	95.80231	100	1.22458	0.010	-4.19769	30.00000	Linear
M 87 1-3 Dichloropropene total	0.43383	0.41687	0.41687	0.010	-3.91039	30.00000	Averaged
93 o-Xylene	47.52789	50.00000	1.14222	0.010	-4.94422	30.00000	Linear
91 Styrene	1.96775	1.97896	1.97896	0.010	0.56943	30.00000	Averaged
90 Bromoform ++	0.46392	0.49726	0.49726	0.100	7.18722	30.00000	Averaged
96 Isopropylbenzene	47.82468	50.00000	2.96875	0.010	-4.35064	30.00000	Linear
\$ 97 Bromofluorobenzene	0.70818	0.72451	0.72451	0.010	2.30475	30.00000	Averaged
98 Bromobenzene	48.58200	50.00000	1.22244	0.010	-2.83600	30.00000	Linear
100 n-Propylbenzene	48.50483	50.00000	3.59279	0.010	-2.99033	30.00000	Linear
92 1,1,2,2-Tetrachloroethane++	57.92332	50.00000	0.90674	0.300	15.84664	30.00000	Linear
101 2-Chlorotoluene	49.25300	50.00000	2.14676	0.010	-1.49399	30.00000	Linear
94 1,2,3-Trichloropropane	0.74027	0.74070	0.74070	0.010	0.05822	30.00000	Averaged
104 1,3,5-Trimethylbenzene	48.46722	50.00000	2.53744	0.010	-3.06556	30.00000	Linear
95 trans-1,4-Dichloro-2-Butene	55.23954	50.00000	0.25284	0.010	10.47909	40.00000	Linear

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv11.i Injection Date: 16-JAN-2011 09:23  
 Lab File ID: a8960.d Init. Cal. Date(s): 14-JAN-2011 15-JAN-2011  
 Analysis Type: WATER Init. Cal. Times: 11:09 13:06  
 Lab Sample ID: 1400 Quant Type: ISTD  
 Method: /var/chem/msv11.i/2110116.s.b/8260bw11.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
102 4-Chlorotoluene	48.76687	50.00000	2.26106	0.010	-2.46626	30.00000	Linear
105 tert-butylbenzene	47.81706	50.00000	1.33898	0.010	-4.36588	30.00000	Linear
106 1,2,4-Trimethylbenzene	48.30595	50.00000	2.61440	0.010	-3.38809	30.00000	Linear
107 sec-Butylbenzene	48.54669	50.00000	3.10886	0.010	-2.90663	30.00000	Linear
111 p-Isopropyltoluene	47.92295	50.00000	2.51972	0.010	-4.15409	30.00000	Linear
108 1,3-Dichlorobenzene	49.05696	50.00000	1.48427	0.010	-1.88608	30.00000	Linear
110 1,4-Dichlorobenzene	49.24021	50.00000	1.54775	0.010	-1.51958	30.00000	Linear
114 n-Butylbenzene	48.18701	50.00000	2.28508	0.010	-3.62598	30.00000	Linear
113 1,2-Dichlorobenzene	49.89651	50.00000	1.43588	0.010	-0.20698	30.00000	Linear
IM 120 TOTAL XYLENE	143	150	1.25398	0.100	-4.44653	30.00000	Linear
115 1,2-Dibromo-3-Chloropropane	55.97041	50.00000	0.17577	0.010	11.94082	40.00000	Linear
118 Hexachlorobutadiene	47.84979	50.00000	0.24075	0.010	-4.30042	30.00000	Linear
116 1,2,4-Trichlorobenzene	50.18815	50.00000	0.73548	0.010	0.37631	30.00000	Linear
117 Naphthalene	51.68520	50.00000	1.80285	0.010	3.37041	30.00000	Linear
119 1,2,3-Trichlorobenzene	52.54682	50.00000	0.59440	0.010	5.09365	30.00000	Linear

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2011 11:14  
 End Cal Date : 07-JAN-2011 20:23  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv5.i/2110107p.s.b/8260Bw5.m  
 Cal Date : 12-Jan-2011 10:50 rjo

## Calibration File Names:

Level 1: /var/chem/msv5.i/2110107p.s.b/k9759.d  
 Level 2: /var/chem/msv5.i/2110107p.s.b/k9761.d  
 Level 3: /var/chem/msv5.i/2110107p.s.b/k9762.d  
 Level 4: /var/chem/msv5.i/2110107p.s.b/k9763.d  
 Level 5: /var/chem/msv5.i/2110107p.s.b/k9764.d  
 Level 6: /var/chem/msv5.i/2110107p.s.b/k9760.d  
 Level 7: /var/chem/msv5.i/2110107p.s.b/k9758.d

Compound	5	20	50	100	200	10	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	1										
	Level 7										
1 Dichlorodifluoromethane	0.18213  0.21335	0.18215	0.18824	0.18705	0.17952	0.15569					
							AVRG		0.18402		9.19371
2 Chloromethane ++	0.16655  0.18510	0.15207	0.16114	0.16824	0.18074	0.14542					
							AVRG		0.16561		8.63632
3 Vinyl Chloride +	0.18714  0.20164	0.17739	0.18677	0.19290	0.19694	0.16628					
							AVRG		0.18701		6.43838
4 1-3 Butadiene	0.17650  +++++	0.16735	0.14966	0.16469	0.16592	0.19302					
							AVRG		0.16952		8.49331

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2011 11:14  
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 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv5.i/2110107p.s.b/8260Bw5.m  
 Cal Date : 12-Jan-2011 10:50 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 7										
5 Bromomethane	0.08290	0.08325	0.08435	0.09416	0.10125	0.07734					
	0.10832						AVRG		0.09022		12.53249
8 Chloroethane	10252	38322	98413	194104	384300	21292					
	3016						LINR	-0.02138	0.09061		0.99981
9 Trichlorofluoromethane	0.24515	0.23400	0.24334	0.23304	0.23177	0.20877					
	0.27355						AVRG		0.23852		8.16413
28 2-Chloropropene	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+00		0.000e+00<-
10 Ethyl Ether	0.11804	0.10653	0.10162	0.10317	0.10023	0.09822					
	0.09838						AVRG		0.10374		6.68560
160 Ethanol	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+00		0.000e+00<-
11 1,1-Dichloroethene +	0.12894	0.12542	0.13148	0.12551	0.13167	0.11487					
	0.15010						AVRG		0.12971		8.20527

GCAL, Inc.

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 Cal Date : 12-Jan-2011 10:50 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 7										
12 Carbon Disulfide	49367 14109	178308	434865	927322	1867243	85501	LINR	0.00780	0.44123		0.99984
13 1,1,2Trichlorotrifluoroethane	0.13414 0.15712	0.14195	0.13944	0.13780	0.13307	0.12795	AVRG		0.13878		6.70288
14 Methyl Iodide	7314 699	38493	125805	298908	622846	16380	LINR	0.09612	0.14977		0.99846
15 Acrolein	0.01936 ++++	0.01960	0.02027	0.02058	0.02068	0.01967	AVRG		0.02003		2.77599
16 Allyl chloride	0.15946 0.18382	0.13949	0.12684	0.13741	0.12923	0.13951	AVRG		0.14511		13.82033
17 Methylene Chloride	0.20386 0.24097	0.20276	0.19357	0.19148	0.18840	0.19041	AVRG		0.20164		9.10549
18 Acetone	0.14082 ++++	0.12015	0.10709	0.10867	0.10353	0.13700	AVRG		0.11954		13.42363

GCAL, Inc.

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 7										
19 trans-1,2-Dichloroethene	0.21121	0.20017	0.21061	0.20508	0.20267	0.18840					
	0.26763						AVRG		0.21225		12.05581
20 Methyl Acetate	0.21196	0.22316	0.20887	0.18980	0.18838	0.21908					
	+++++						AVRG		0.20687		7.09687
21 Hexane	0.17270	0.14172	0.14745	0.14989	0.14692	0.12447					
	+++++						AVRG		0.14719		10.54326
22 MTBE	0.45339	0.44413	0.45379	0.44744	0.43010	0.41539					
	0.56013						AVRG		0.45777		10.31133
23 tert-Butyl Alcohol	0.02411	0.02826	0.02663	0.02428	0.02393	0.02585					
	+++++						AVRG		0.02551		6.76259
24 Acetonitrile	0.03745	0.03667	0.03238	0.03173	0.03280	0.03693					
	+++++						AVRG		0.03466		7.54418
25 Isopropyl Ether	0.58455	0.59864	0.56153	0.60192	0.59947	0.59564					
	0.64632						AVRG		0.59830		4.24412

GCAL, Inc.

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Compound	5	20	50	100	200	10	Curve	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2
	1									
	Level 7									
26 Chloroprene	0.22145	0.21048	0.20443	0.21511	0.21784	0.21774				
	0.28334						AVRG		0.22434	11.86180
27 1,1-Dichloroethane ++	0.28306	0.30126	0.29772	0.29676	0.30246	0.30360				
	0.33416						AVRG		0.30272	5.11496
29 Acrylonitrile	0.09118	0.08983	0.09378	0.09558	0.09674	0.08846				
	0.09751						AVRG		0.09330	3.78952
161 Ethyl-tert butyl ether	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++						AVRG		0.000e+00	0.000e+00<-
30 Vinyl Acetate	0.38294	0.37902	0.37621	0.38821	0.39929	0.35737				
	0.34792						AVRG		0.37585	4.71466
M 61 Total 1,2-Dichloroethene	0.22545	0.21939	0.22454	0.22547	0.22112	0.21079				
	0.27490						AVRG		0.22881	9.16269
31 cis-1,2-Dichloroethene	0.23969	0.23862	0.23848	0.24587	0.23957	0.23317				
	0.28216						AVRG		0.24537	6.78238

GCAL, Inc.

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 7										
32 2,2-Dichloropropane	0.27516	0.26128	0.26751	0.26402	0.25365	0.25833					
	0.34282						AVRG		0.27468		11.21833
34 Cyclohexane	0.26245	0.24785	0.25640	0.25827	0.26075	0.22756					
	0.30727						AVRG		0.26008		9.22934
33 Bromochloromethane	0.09191	0.08910	0.08897	0.08393	0.08048	0.09348					
	0.09068						AVRG		0.08836		5.20317
35 Chloroform +	0.33850	0.32115	0.31744	0.31477	0.31648	0.31730					
	0.31917						AVRG		0.32069		2.52809
36 Carbon Tetrachloride	0.22895	0.21609	0.21750	0.21535	0.21490	0.19101					
	0.21832						AVRG		0.21459		5.33913
37 Ethyl Acetate	0.32030	0.32947	0.32449	0.32206	0.32061	0.29913					
	0.25744						AVRG		0.31050		8.13903
38 Tetrahydrofuran	0.11891	0.12099	0.11940	0.11860	0.11488	0.10933					
	0.09710						AVRG		0.11417		7.42461

GCAL, Inc.

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 7										
40 1,1,1-Trichloroethane	0.27233	0.27410	0.26834	0.26657	0.26001	0.25044					
	0.31684						AVRG		0.27266		7.72783
41 sec-Butanol	0.03000	0.02758	0.02893	0.02830	0.02883	0.03629					
	++++						AVRG		0.02999		10.63226
159 Heptane	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+00		0.000e+00 <-
42 2-Butanone	0.18332	0.18317	0.18615	0.18224	0.18842	0.18800					
	0.25140						AVRG		0.19467		12.91101
43 1,1-Dichloropropene	0.24724	0.24896	0.24894	0.25655	0.25105	0.23567					
	0.28184						AVRG		0.25289		5.62626
44 2-2-4 trimethyl Pentane	57497	170202	404981	833005	1547297	131928					
	++++						LINR	-0.06525	0.36160		0.99869
162 tert-butyl formate	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+00		0.000e+00 <-

GCAL, Inc.

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 Cal Date : 12-Jan-2011 10:50 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2
	1									
	Level 7									
45 Benzene	0.69934	0.69182	0.67001	0.68875	0.68970	0.71245				
	0.83929						AVRG		0.71305	8.00816
46 Propionitrile	0.04468	0.04815	0.04733	0.04783	0.04612	0.04885				
	0.03313						AVRG		0.04516	12.13737
47 Methacrylonitrile	0.19429	0.19534	0.19753	0.20452	0.18953	0.20179				
	0.27457						AVRG		0.20822	14.24787
163 tert amyl methyl ether	++++	++++	++++	++++	++++	++++				
	++++						AVRG		0.000e+00	0.000e+00 <-
49 1,2-Dichloroethane	0.29557	0.27625	0.26784	0.26978	0.26215	0.24877				
	0.31566						AVRG		0.27657	8.07387
50 Isobutyl Alcohol	0.01620	0.01472	0.01653	0.01620	0.01596	0.01673				
	++++						AVRG		0.01606	4.41068
164 tert amyl alcohol	++++	++++	++++	++++	++++	++++				
	++++						AVRG		0.000e+00	0.000e+00 <-

GCAL, Inc.

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Compound	5	20	50	100	200	10	Curve	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2
	1									
	Level 7									
53 Methyl Cyclohexane	0.20932	0.21324	0.22447	0.21610	0.22195	0.18591				
	0.25573						AVRG		0.21810	
										9.56744
54 Trichloroethene	0.16533	0.16995	0.16489	0.16468	0.16815	0.15200				
	0.19390						AVRG		0.16841	
										7.49901
55 1,3 Difluorobenzene	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++						AVRG		0.000e+00	
										0.000e+00 <-
56 n-Butanol	0.01089	0.01165	0.01202	0.01209	0.01143	0.01116				
	0.00885						AVRG		0.01116	
										9.90218 <-
57 Dibromomethane	0.13527	0.13582	0.13043	0.13394	0.12767	0.12863				
	0.16496						AVRG		0.13667	
										9.42274
58 2-3 Dichloro-1-Propene	0.28623	0.30092	0.28282	0.28773	0.29321	0.28851				
	0.30252						AVRG		0.29171	
										2.57791
59 1,2-Dichloropropane +	0.17410	0.18784	0.18092	0.18619	0.18984	0.17653				
	0.20105						AVRG		0.18521	
										4.91565

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 7										
60 Bromodichloromethane	0.25853	0.25689	0.25729	0.26972	0.26721	0.25443					
	0.25081						AVRG		0.25927		2.62217
62 Methyl methacrylate	0.17686	0.18825	0.20009	0.18648	0.19072	0.18513					
	++++						AVRG		0.18792		4.04126
68 1,4 Difluorobenzene	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+00		0.000e+00 <-
63 1,4- Dioxane	0.00232	0.00285	0.00262	0.00284	0.00285	0.00289					
	++++						AVRG		0.00273		8.06539
88 Methyl Disulfide	++++	++++	++++	++++	++++	++++					
	++++						AVRG		0.000e+00		0.000e+00 <-
64 1-Bromo-2-chloroethane	0.28497	0.29836	0.28543	0.30052	0.28717	0.27698					
	0.32559						AVRG		0.29415		5.46561
65 2-Chloroethyl vinyl ether	0.15151	0.17983	0.16519	0.18072	0.18436	0.15534					
	0.14650						AVRG		0.16621		9.35043

GCAL, Inc.

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Compound	5	20	50	100	200	10	Curve	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2
	1									
	Level 7									
66 cis-1,3-Dichloropropene	0.32915	0.32464	0.32403	0.34278	0.33732	0.30590				
	0.29506						AVRG		0.32270	5.23186
69 Toluene +	1.62929	1.61655	1.54359	1.64003	1.61117	1.49916				
	1.90516						AVRG		1.63499	7.92601
M 6 1-3 Dichloropropene-Total	0.31828	0.32151	0.32659	0.33701	0.33431	0.30195				
	0.31393						AVRG		0.32194	3.75971
70 2-nitropropane	0.07803	0.08255	0.09337	0.09326	0.09493	0.08165				
	0.06954						AVRG		0.08476	11.20654
71 4-methyl-2-pentanone	0.32255	0.34849	0.35361	0.35047	0.35434	0.30936				
	0.39736						AVRG		0.34803	8.00359
72 Tetrachloroethene	0.24256	0.27033	0.26280	0.26815	0.25558	0.25100				
	0.26958						AVRG		0.26000	4.08665
73 trans-1,3-Dichloropropene	0.67307	0.68432	0.68318	0.71126	0.69334	0.64824				
	0.74403						AVRG		0.69106	4.37479

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Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 7										
74 Ethyl Methacrylate	0.57993	0.53014	0.55351	0.54948	0.55699	0.48239					
	0.45914						AVRG		0.53023		8.23571
75 1,1,2-Trichloroethane	0.37680	0.38011	0.36565	0.39123	0.38204	0.38129					
	0.40345						AVRG		0.38294		3.08456
76 Dibromochloromethane	0.42485	0.42532	0.42815	0.45616	0.44729	0.41457					
	0.43055						AVRG		0.43241		3.31489
M 7 Total Difluorobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++						AVRG		0.000e+00		0.000e+00 <-
77 1,3-Dichloropropane	0.82225	0.75373	0.73701	0.79763	0.77213	0.73602					
	0.79966						AVRG		0.77406		4.33954
78 1-nitropropane	0.05167	0.06059	0.06210	0.05893	0.06282	0.04558					
	+++++						AVRG		0.05695		12.04912
79 1,2-Dibromoethane (EDB)	0.41657	0.41081	0.40659	0.44021	0.43400	0.39866					
	0.39234						AVRG		0.41417		4.25439

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2011 11:14  
 End Cal Date : 07-JAN-2011 20:23  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv5.i/2110107p.s.b/8260Bw5.m  
 Cal Date : 12-Jan-2011 10:50 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2
	1									
	Level 7									
81 1,2 Difluorobenzene	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++						AVRG		0.000e+00	0.000e+00<-
165 3,3 dimethyl 1-butanol	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++						AVRG		0.000e+00	0.000e+00<-
80 2-Hexanone	0.49686	0.55789	0.54164	0.57324	0.58243	0.51311				
	0.59681						AVRG		0.55171	6.65161
82 1-Chlorohexane	0.56687	0.45218	0.47827	0.56497	0.49174	0.49796				
	0.65285						AVRG		0.52926	13.11151
84 Chlorobenzene ++	1.03383	0.99983	0.95569	1.03027	1.01486	0.97406				
	1.11223						AVRG		1.01725	4.98514
85 Ethylbenzene +	0.50839	0.49562	0.49098	0.51357	0.51565	0.47600				
	0.60945						AVRG		0.51567	8.46658
86 1,1,1,2-Tetrachloroethane	0.36925	0.35833	0.35310	0.36714	0.35687	0.36558				
	0.44012						AVRG		0.37291	8.10461

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2011 11:14  
 End Cal Date : 07-JAN-2011 20:23  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv5.i/2110107p.s.b/8260Bw5.m  
 Cal Date : 12-Jan-2011 10:50 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2
	1									
	Level 7									
87 p,m-Xylene	0.59849	0.61488	0.58923	0.65597	0.65094	0.56374				
	0.66451						AVRG		0.61968	6.19191
89 o-Xylene	0.58431	0.60304	0.60511	0.64691	0.64243	0.56084				
	0.63074						AVRG		0.61048	5.17633
90 Styrene	0.97718	1.04843	1.05187	1.15169	1.16530	1.06015				
	1.02756						AVRG		1.06888	6.28230
91 Bromoform ++	0.29801	0.31469	0.30906	0.34065	0.33337	0.30456				
	0.23229						AVRG		0.30466	11.62145
92 1,5 Cyclooctadiene	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++						AVRG		0.000e+00	0.000e+00<-
93 Isopropylbenzene	1.41166	1.50717	1.49183	1.60660	1.62216	1.34958				
	1.57965						AVRG		1.50981	6.76039
95 n-Propylbenzene	2.45732	2.30461	2.29504	2.40271	2.42438	2.20784				
	2.72316						AVRG		2.40215	6.91021

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2011 11:14  
 End Cal Date : 07-JAN-2011 20:23  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv5.i/2110107p.s.b/8260Bw5.m  
 Cal Date : 12-Jan-2011 10:50 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1										
	Level 7										
96 Bromobenzene	1.17356	1.08521	1.03701	1.06923	1.05722	1.07848					
	1.37411						AVRG		1.12498		10.49305
97 1,1,2,2-Tetrachloroethane++	0.95186	0.89007	0.85006	0.86506	0.84873	0.87670					
	0.89863						AVRG		0.88301		4.04548
98 2-Chlorotoluene	1.78147	1.64082	1.65435	1.72171	1.74362	1.62028					
	1.88464						AVRG		1.72098		5.40754
99 1,3,5-Trimethylbenzene	1.43821	1.41905	1.43637	1.50853	1.49614	1.36069					
	1.37943						AVRG		1.43406		3.82101
100 1,2,3-Trichloropropane	1.23635	1.15914	1.13366	1.18338	1.16283	1.13242					
	1.22232						AVRG		1.17573		3.47092
101 trans-1,4-Dichloro-2-Butene	0.30333	0.29083	0.29099	0.28172	0.28793	0.28417					
	0.38654						AVRG		0.30364		12.25099
102 Cyclohexanone	0.11477	0.12070	0.11696	0.11078	0.09803	0.11891					
	0.10759						AVRG		0.11253		6.97740

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2011 11:14  
 End Cal Date : 07-JAN-2011 20:23  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv5.i/2110107p.s.b/8260Bw5.m  
 Cal Date : 12-Jan-2011 10:50 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2
	1									
	Level 7									
114 2-ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++						AVRG		0.000e+00	0.000e+00 <-
103 4-Chlorotoluene	1.56660	1.59562	1.55728	1.62404	1.63787	1.52805				
	1.68755						AVRG		1.59957	3.40621
104 tert-butylbenzene	0.88449	0.86850	0.89926	0.89207	0.88647	0.83051				
	0.99562						AVRG		0.89384	5.62855
105 Pentachloroethane	0.31894	0.27290	0.28610	0.28454	0.31718	0.30933				
	0.29261						AVRG		0.29737	6.00609
106 1,2,4-Trimethylbenzene	1.48837	1.46102	1.48640	1.53425	1.55119	1.38182				
	1.52667						AVRG		1.48996	3.83653
107 sec-Butylbenzene	1.70842	1.71936	1.72066	1.82504	1.83579	1.64121				
	2.01734						AVRG		1.78112	6.99172
108 p-Isopropyltoluene	1.29942	1.29877	1.34237	1.38588	1.41100	1.23765				
	1.43474						AVRG		1.34426	5.24474

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2011 11:14  
 End Cal Date : 07-JAN-2011 20:23  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv5.i/2110107p.s.b/8260Bw5.m  
 Cal Date : 12-Jan-2011 10:50 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2
	1									
	Level 7									
119 1-3 Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++						AVRG		0.000e+00	0.000e+00 <-
118 1-4 Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++						AVRG		0.000e+00	0.000e+00 <-
109 Dicylopentadiene	1.93689	2.05320	2.07844	2.18340	2.15803	2.22008				
	2.02635						AVRG		2.09377	4.74231
113 3-ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++						AVRG		0.000e+00	0.000e+00 <-
110 1,3-Dichlorobenzene	0.94124	0.87044	0.90138	0.89758	0.90680	0.86147				
	0.91045						AVRG		0.89848	2.94678
112 1,4-Dichlorobenzene	0.93862	0.94816	0.91764	0.95142	0.94630	0.95817				
	1.07106						AVRG		0.96162	5.19472
M 124 TOTAL XYLENE	0.59376	0.61093	0.59452	0.65295	0.64810	0.56277				
	0.65326						AVRG		0.61661	5.77047

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2011 11:14  
 End Cal Date : 07-JAN-2011 20:23  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv5.i/2110107p.s.b/8260Bw5.m  
 Cal Date : 12-Jan-2011 10:50 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2
	1									
	Level 7									
117 1-2 Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++						AVRG		0.000e+00	0.000e+00 <-
115 n-Butylbenzene	1.25687	1.22977	1.27974	1.35498	1.35383	1.13625				
	1.31269						AVRG		1.27487	6.04895
116 1,2-Dichlorobenzene	0.91239	0.85678	0.87200	0.87581	0.87732	0.75361				
	0.90045						AVRG		0.86405	6.03022
M 127 Total Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++						AVRG		0.000e+00	0.000e+00 <-
120 1,2-Dibromo-3-Chloropropane	0.15451	0.17082	0.17334	0.17251	0.17652	0.15610				
	0.13685						AVRG		0.16295	8.83937
128 2-methylnapthalene	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++						AVRG		0.000e+00	0.000e+00 <-
121 Benzal Chloride	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++						AVRG		0.000e+00	0.000e+00

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2011 11:14  
 End Cal Date : 07-JAN-2011 20:23  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/msv5.i/2110107p.s.b/8260Bw5.m  
 Cal Date : 12-Jan-2011 10:50 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	1 Level 7										
122 Hexachlorobutadiene	0.17684 0.16191	0.17605	0.17054	0.17265	0.17044	0.16373					
							AVRG		0.17031		3.34753
123 1,2,4-Trichlorobenzene	0.32969 0.42043	0.38198	0.38323	0.41611	0.42552	0.35496					
							AVRG		0.38742		9.30543
125 Naphthalene	1.11706 1.06028	1.24367	1.32154	1.43113	1.48753	1.09531					
							AVRG		1.25093		13.53402
126 1,2,3-Trichlorobenzene	0.36033 0.35836	0.34503	0.36122	0.38756	0.39377	0.31733					
							AVRG		0.36051		7.11500
\$ 39 Dibromofluoromethane	0.28146 0.27590	0.28424	0.28721	0.27971	0.27345	0.28011					
							AVRG		0.28030		1.66892
\$ 48 1,2-Dichloroethane-d4	0.17400 0.17125	0.17405	0.17624	0.17047	0.16938	0.17010					
							AVRG		0.17221		1.48445
\$ 67 Toluene-d8	2.08625 2.15291	2.08556	2.01470	2.00578	2.01707	2.09355					
							AVRG		2.06512		2.63391

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2011 11:14  
End Cal Date : 07-JAN-2011 20:23  
Quant Method : ISTD  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /var/chem/msv5.i/2110107p.s.b/8260Bw5.m  
Cal Date : 12-Jan-2011 10:50 rjo

Compound	5	20	50	100	200	10	Curve	Coefficients			%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	or R^2
	1										
	Level 7										
=====											
\$ 94 Bromofluorobenzene	0.59508	0.58466	0.59016	0.63036	0.60515	0.57523					
	0.58392						AVRG		0.59494		3.06681
-----											
=====											

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 07-JAN-2011 11:14  
End Cal Date : 07-JAN-2011 20:23  
Quant Method : ISTD  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /var/chem/msv5.i/2110107p.s.b/8260Bw5.m  
Cal Date : 12-Jan-2011 10:50 rjo

Average %RSD Results.
=====
Calculated Average %RSD = 7.08465
Maximum Average %RSD = 15.00000
* Passed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response

GCAL, Inc.

RECOVERY REPORT

Client Name: Client SDG: 2110107.s  
Sample Matrix: LIQUID Fraction: VOA  
Lab Smp Id: 1600 Client Smp ID: APP9ICV  
Level: LOW Operator: JCK  
Data Type: MS DATA SampleType: LCS  
SpikeList File: app9icv.spk Quant Type: ISTD  
Sublist File: APP9.sub  
Method File: /var/chem/msv5.i/2110107.s.b/8260Bw5.m  
Misc Info: MSV~20793~\*1\*JCK

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
4 1-3 Butadiene	50.0	45.1	90.20	60-140
10 Ethyl Ether	250	317	126.74	60-140
16 Allyl chloride	50.0	55.1	110.23	60-140
23 tert-Butyl Alcohol	50.0	60.1	120.12	60-140
24 Acetonitrile	200	270	134.79	60-140
25 Isopropyl Ether	50.0	47.8	95.50	60-140
26 Chloroprene	50.0	52.2	104.34	60-140
37 Ethyl Acetate	250	254	101.69	60-140
38 Tetrahydrofuran	250	237	94.97	60-140
41 sec-Butanol	50.0	58.1	116.26	60-140
44 2-2-4 trimethyl Pentane	50.0	52.3	104.69	60-140
46 Propionitrile	250	273	109.10	60-140
47 Methacrylonitrile	50.0	55.3	110.59	60-140
50 Isobutyl Alcohol	250	255	102.03	60-140
56 n-Butanol	250	263	105.02	60-140
58 2-3 Dichloro-1-Propene	50.0	61.2	122.50	60-140
62 Methyl methacrylate	50.0	51.3	102.54	60-140
63 1,4- Dioxane	1250	1330	106.11	60-140
70 2-nitropropane	50.0	62.6	125.10	60-140
74 Ethyl Methacrylate	50.0	52.8	105.52	60-140
78 1-nitropropane	50.0	63.6	127.24	60-140
92 1,5 Cyclooctadiene	50.0	0.00	NT*	60-140
102 Cyclohexanone	100	103	102.67	60-140
105 Pentachloroethane	50.0	51.3	102.51	60-140
109 Dicylopentadiene	50.0	59.2	118.36	60-140
121 Benzal Chloride	100	0.00	NT 0.00*	60-140

GCAL, Inc.

RECOVERY REPORT

Client Name: Client SDG: 2110107p.s  
 Sample Matrix: LIQUID Fraction: VOA  
 Lab Smp Id: 1600 Client Smp ID: 8260ICV  
 Level: LOW Operator: JCK  
 Data Type: MS DATA SampleType: LCS  
 SpikeList File: ICV.spk Quant Type: ISTD  
 Sublist File: 8260b.sub  
 Method File: /var/chem/msv5.i/2110107p.s.b/8260Bw5.m  
 Misc Info: MSV~20794~\*1\*JCK

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 Dichlorodifluoromethane	50.0	66.1	132.12	60-140
2 Chloromethane ++	50.0	54.8	109.54	70-130
3 Vinyl Chloride +	50.0	51.3	102.64	70-130
5 Bromomethane	50.0	55.9	111.79	60-140
8 Chloroethane	50.0	54.0	108.00	70-130
9 Trichlorofluoromethane	50.0	52.0	103.95	70-130
11 1,1-Dichloroethene +	50.0	47.7	95.34	70-130
12 Carbon Disulfide	50.0	51.8	103.63	70-130
13 1,1,2Trichlotrifluoroethane	50.0	51.2	102.39	70-130
14 Methyl Iodide	50.0	38.4	76.85	70-130
15 Acrolein	250	205	82.18	60-140
17 Methylene Chloride	50.0	47.8	95.67	70-130
18 Acetone	50.0	51.8	103.65	60-140
19 trans-1,2-Dichloroethene	50.0	48.6	97.23	70-130
22 MTBE	50.0	48.5	96.98	70-130
27 1,1-Dichloroethane ++	50.0	50.7	101.37	70-130
29 Acrylonitrile	250	239	95.58	60-140
30 Vinyl Acetate	50.0	35.4	70.78	70-130
31 cis-1,2-Dichloroethene	50.0	49.0	97.94	70-130
32 2,2-Dichloropropane	50.0	47.0	94.02	70-130
34 Cyclohexane	50.0	47.5	95.00	70-130
33 Bromochloromethane	50.0	49.8	99.57	70-130
35 Chloroform +	50.0	50.1	100.27	70-130
36 Carbon Tetrachloride	50.0	50.4	100.73	70-130
40 1,1,1-Trichloroethane	50.0	47.6	95.26	70-130
43 1,1-Dichloropropene	50.0	48.8	97.70	70-130
42 2-Butanone	50.0	50.0	100.08	60-140
45 Benzene	50.0	47.8	95.51	70-130
49 1,2-Dichloroethane	50.0	47.3	94.58	70-130
53 Methyl Cyclohexane	50.0	49.7	99.32	70-130
54 Trichloroethene	50.0	49.2	98.43	70-130
57 Dibromomethane	50.0	47.8	95.57	70-130
59 1,2-Dichloropropane +	50.0	52.1	104.16	70-130

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
60 Bromodichloromethane	50.0	50.4	100.85	70-130
65 2-Chloroethyl vinyl ether	50.0	50.5	101.03	60-140
66 cis-1,3-Dichloropropene	50.0	50.7	101.45	70-130
69 Toluene +	50.0	52.0	103.94	70-130
72 Tetrachloroethene	50.0	52.4	104.70	70-130
71 4-methyl-2-pentanone	50.0	51.3	102.58	60-140
73 trans-1,3-Dichloropropene	50.0	54.7	109.34	70-130
75 1,1,2-Trichloroethane	50.0	56.3	112.59	70-130
76 Dibromochloromethane	50.0	53.0	106.02	70-130
77 1,3-Dichloropropane	50.0	56.0	111.99	70-130
79 1,2-Dibromoethane (EDB)	50.0	53.6	107.22	70-130
80 2-Hexanone	50.0	52.9	105.87	60-140
84 Chlorobenzene ++	50.0	52.8	105.58	70-130
85 Ethylbenzene +	50.0	52.6	105.21	70-130
86 1,1,1,2-Tetrachloroethane	50.0	49.7	99.40	70-130
87 p,m-Xylene	100	108	107.86	70-130
89 o-Xylene	50.0	54.4	108.87	70-130
90 Styrene	50.0	58.0	116.06	70-130
91 Bromoform ++	50.0	56.4	112.73	70-130
93 Isopropylbenzene	50.0	54.4	108.86	70-130
96 Bromobenzene	50.0	50.4	100.75	70-130
95 n-Propylbenzene	50.0	52.5	105.05	70-130
97 1,1,2,2-Tetrachloroethane++	50.0	50.0	99.90	70-130
98 2-Chlorotoluene	50.0	53.8	107.60	70-130
99 1,3,5-Trimethylbenzene	50.0	53.7	107.34	70-130
100 1,2,3-Trichloropropane	50.0	52.5	105.02	70-130
101 trans-1,4-Dichloro-2-Butene	50.0	52.0	104.00	60-140
103 4-Chlorotoluene	50.0	52.1	104.12	70-130
104 tert-butylbenzene	50.0	52.1	104.11	70-130
106 1,2,4-Trimethylbenzene	50.0	53.7	107.33	70-130
107 sec-Butylbenzene	50.0	51.9	103.88	70-130
108 p-Isopropyltoluene	50.0	55.0	109.99	70-130
110 1,3-Dichlorobenzene	50.0	52.0	103.92	70-130
112 1,4-Dichlorobenzene	50.0	51.7	103.43	70-130
115 n-Butylbenzene	50.0	52.9	105.85	70-130
116 1,2-Dichlorobenzene	50.0	51.4	102.73	70-130
120 1,2-Dibromo-3-Chloropropane	50.0	56.4	112.81	60-140
122 Hexachlorobutadiene	50.0	51.6	103.21	70-130
123 1,2,4-Trichlorobenzene	50.0	55.2	110.35	70-130
125 Naphthalene	50.0	55.5	111.00	70-130
126 1,2,3-Trichlorobenzene	50.0	55.4	110.73	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 39 Dibromofluoromethane	50.0	47.4	94.72	77-127

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv5.i Injection Date: 18-JAN-2011 13:19  
Lab File ID: k9905.d Init. Cal. Date(s): 07-JAN-2011 07-JAN-2011  
Analysis Type: WATER Init. Cal. Times: 11:14 20:23  
Lab Sample ID: 1400 Quant Type: ISTD  
Method: /var/chem/msv5.i/2110118p.s.b/8260Bw5.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Dichlorodifluoromethane	0.18402	0.20822	0.20822	0.010	13.15246	40.00000	Averaged
2 Chloromethane ++	0.16561	0.17623	0.17623	0.100	6.41501	30.00000	Averaged
3 Vinyl Chloride +	0.18701	0.19986	0.19986	0.010	6.87224	20.00000	Averaged
5 Bromomethane	0.09022	0.09120	0.09120	0.010	1.07661	40.00000	Averaged
8 Chloroethane	56.51034	50.00000	0.10435	0.010	13.02069	30.00000	Linear
9 Trichlorofluoromethane	0.23852	0.26024	0.26024	0.010	9.10697	30.00000	Averaged
11 1,1-Dichloroethene +	0.12971	0.13867	0.13867	0.010	6.90811	20.00000	Averaged
12 Carbon Disulfide	56.92631	50.00000	0.49891	0.010	13.85263	30.00000	Linear
13 1,1,2Trichlorotrifluoroethane	0.13878	0.15490	0.15490	0.010	11.61456	30.00000	Averaged
14 Methyl Iodide	43.53534	50.00000	0.11601	0.010	-12.92931	30.00000	Linear
15 Acrolein	0.02003	0.01860	0.01860	0.010	-7.10293	40.00000	Averaged
17 Methylene Chloride	0.20164	0.20761	0.20761	0.010	2.96283	30.00000	Averaged
18 Acetone	0.11954	0.12318	0.12318	0.010	3.03921	40.00000	Averaged
19 trans-1,2-Dichloroethene	0.21225	0.22477	0.22477	0.010	5.89722	30.00000	Averaged
20 Methyl Acetate	0.20687	0.23041	0.23041	0.010	11.37677	30.00000	Averaged
21 Hexane	0.14719	0.17417	0.17417	0.010	18.32479	30.00000	Averaged
22 MTBE	0.45777	0.48767	0.48767	0.010	6.53150	30.00000	Averaged
27 1,1-Dichloroethane ++	0.30272	0.33132	0.33132	0.100	9.45057	30.00000	Averaged
29 Acrylonitrile	0.09330	0.09540	0.09540	0.010	2.25584	40.00000	Averaged
30 Vinyl Acetate	0.37585	0.27619	0.27619	0.010	-26.51588	30.00000	Averaged
M 61 Total 1,2-Dichloroethene	0.22881	0.24468	0.24468	0.010	6.93748	30.00000	Averaged
31 cis-1,2-Dichloroethene	0.24537	0.26460	0.26460	0.010	7.83734	30.00000	Averaged
32 2,2-Dichloropropane	0.27468	0.29296	0.29296	0.010	6.65365	30.00000	Averaged
34 Cyclohexane	0.26008	0.28553	0.28553	0.010	9.78406	30.00000	Averaged
33 Bromochloromethane	0.08836	0.09582	0.09582	0.010	8.43511	30.00000	Averaged
35 Chloroform +	0.32069	0.34304	0.34304	0.010	6.97117	20.00000	Averaged
36 Carbon Tetrachloride	0.21459	0.24299	0.24299	0.010	13.23503	30.00000	Averaged
\$ 39 Dibromofluoromethane	0.28030	0.27778	0.27778	0.050	-0.89953	30.00000	Averaged
40 1,1,1-Trichloroethane	0.27266	0.28563	0.28563	0.010	4.75654	30.00000	Averaged
42 2-Butanone	0.19467	0.21833	0.21833	0.010	12.14994	40.00000	Averaged
43 1,1-Dichloropropene	0.25289	0.26811	0.26811	0.010	6.01786	30.00000	Averaged
45 Benzene	0.71305	0.72909	0.72909	0.010	2.24870	30.00000	Averaged
\$ 48 1,2-Dichloroethane-d4	0.17221	0.17377	0.17377	0.050	0.90524	30.00000	Averaged
49 1,2-Dichloroethane	0.27657	0.29427	0.29427	0.010	6.39678	30.00000	Averaged
53 Methyl Cyclohexane	0.21810	0.25392	0.25392	0.010	16.42166	30.00000	Averaged

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv5.i Injection Date: 18-JAN-2011 13:19  
 Lab File ID: k9905.d Init. Cal. Date(s): 07-JAN-2011 07-JAN-2011  
 Analysis Type: WATER Init. Cal. Times: 11:14 20:23  
 Lab Sample ID: 1400 Quant Type: ISTD  
 Method: /var/chem/msv5.i/2110118p.s.b/8260Bw5.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
54 Trichloroethene	0.16841	0.17419	0.17419	0.010	3.42779	30.00000	Averaged
57 Dibromomethane	0.13667	0.14709	0.14709	0.010	7.62451	30.00000	Averaged
59 1,2-Dichloropropane +	0.18521	0.20144	0.20144	0.010	8.76401	20.00000	Averaged
60 Bromodichloromethane	0.25927	0.28095	0.28095	0.010	8.36057	30.00000	Averaged
64 1-Bromo-2-chloroethane	0.29415	0.31756	0.31756	0.010	7.95982	30.00000	Averaged
65 2-Chloroethyl vinyl ether	0.16621	0.16401	0.16401	0.010	-1.31966	40.00000	Averaged
66 cis-1,3-Dichloropropene	0.32270	0.36268	0.36268	0.010	12.39104	30.00000	Averaged
67 Toluene-d8	2.06512	1.98392	1.98392	0.050	-3.93190	30.00000	Averaged
69 Toluene +	1.63499	1.62143	1.62143	0.010	-0.82968	20.00000	Averaged
M 6 1-3 Dichloropropene-Total	0.32194	0.36748	0.36748	0.010	14.14641	30.00000	Averaged
71 4-methyl-2-pentanone	0.34803	0.39233	0.39233	0.010	12.73053	40.00000	Averaged
72 Tetrachloroethene	0.26000	0.27107	0.27107	0.010	4.25930	30.00000	Averaged
73 trans-1,3-Dichloropropene	0.69106	0.76026	0.76026	0.010	10.01331	30.00000	Averaged
75 1,1,2-Trichloroethane	0.38294	0.39823	0.39823	0.010	3.99304	30.00000	Averaged
76 Dibromochloromethane	0.43241	0.45830	0.45830	0.010	5.98616	30.00000	Averaged
77 1,3-Dichloropropane	0.77406	0.79127	0.79127	0.010	2.22380	30.00000	Averaged
79 1,2-Dibromoethane (EDB)	0.41417	0.44392	0.44392	0.010	7.18367	30.00000	Averaged
80 2-Hexanone	0.55171	0.60658	0.60658	0.010	9.94575	40.00000	Averaged
82 1-Chlorohexane	0.52926	0.51950	0.51950	0.010	-1.84371	30.00000	Averaged
84 Chlorobenzene ++	1.01725	1.01882	1.01882	0.300	0.15448	30.00000	Averaged
85 Ethylbenzene +	0.51567	0.51038	0.51038	0.010	-1.02494	20.00000	Averaged
86 1,1,1,2-Tetrachloroethane	0.37291	0.36367	0.36367	0.010	-2.47726	30.00000	Averaged
87 p,m-Xylene	0.61968	0.63278	0.63278	0.010	2.11436	30.00000	Averaged
89 o-Xylene	0.61048	0.63490	0.63490	0.010	4.00008	30.00000	Averaged
90 Styrene	1.06888	1.13117	1.13117	0.010	5.82732	30.00000	Averaged
91 Bromoform ++	0.30466	0.33495	0.33495	0.100	9.94088	30.00000	Averaged
93 Isopropylbenzene	1.50981	1.64256	1.64256	0.010	8.79275	30.00000	Averaged
94 Bromofluorobenzene	0.59494	0.61086	0.61086	0.050	2.67734	30.00000	Averaged
95 n-Propylbenzene	2.40215	2.50218	2.50218	0.010	4.16414	30.00000	Averaged
96 Bromobenzene	1.12498	1.08584	1.08584	0.010	-3.47841	30.00000	Averaged
97 1,1,2,2-Tetrachloroethane++	0.88301	0.89732	0.89732	0.300	1.61962	30.00000	Averaged
98 2-Chlorotoluene	1.72098	1.75824	1.75824	0.010	2.16507	30.00000	Averaged
99 1,3,5-Trimethylbenzene	1.43406	1.55105	1.55105	0.010	8.15797	30.00000	Averaged
100 1,2,3-Trichloropropane	1.17573	1.21317	1.21317	0.000	3.18450	30.00000	Averaged
101 trans-1,4-Dichloro-2-Butene	0.30364	0.31280	0.31280	0.010	3.01632	40.00000	Averaged

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv5.i      Injection Date: 18-JAN-2011 13:19  
 Lab File ID: k9905.d      Init. Cal. Date(s): 07-JAN-2011 07-JAN-2011  
 Analysis Type: WATER      Init. Cal. Times: 11:14 20:23  
 Lab Sample ID: 1400      Quant Type: ISTD  
 Method: /var/chem/msv5.i/2110118p.s.b/8260Bw5.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
103 4-Chlorotoluene	1.59957	1.67002	1.67002	0.010	4.40447	30.00000	Averaged
104 tert-butylbenzene	0.89384	0.94090	0.94090	0.010	5.26413	30.00000	Averaged
106 1,2,4-Trimethylbenzene	1.48996	1.57739	1.57739	0.010	5.86814	30.00000	Averaged
107 sec-Butylbenzene	1.78112	1.94695	1.94695	0.010	9.31075	30.00000	Averaged
108 p-Isopropyltoluene	1.34426	1.48578	1.48578	0.010	10.52733	30.00000	Averaged
110 1,3-Dichlorobenzene	0.89848	0.92353	0.92353	0.010	2.78831	30.00000	Averaged
112 1,4-Dichlorobenzene	0.96162	0.97188	0.97188	0.010	1.06693	30.00000	Averaged
M 124 TOTAL XYLENE	0.61661	0.63349	0.63349	0.010	2.73669	30.00000	Averaged
115 n-Butylbenzene	1.27487	1.46667	1.46667	0.010	15.04387	30.00000	Averaged
116 1,2-Dichlorobenzene	0.86405	0.90181	0.90181	0.010	4.37030	30.00000	Averaged
120 1,2-Dibromo-3-Chloropropane	0.16295	0.17811	0.17811	0.010	9.30284	40.00000	Averaged
122 Hexachlorobutadiene	0.17031	0.19669	0.19669	0.010	15.49055	30.00000	Averaged
123 1,2,4-Trichlorobenzene	0.38742	0.43454	0.43454	0.010	12.16434	30.00000	Averaged
125 Naphthalene	1.25093	1.44958	1.44958	0.010	15.87974	30.00000	Averaged
126 1,2,3-Trichlorobenzene	0.36051	0.42193	0.42193	0.010	17.03589	30.00000	Averaged

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msv5.i Injection Date: 18-JAN-2011 14:09  
Lab File ID: k9907.d Init. Cal. Date(s): 07-JAN-2011 07-JAN-2011  
Analysis Type: WATER Init. Cal. Times: 11:14 20:23  
Lab Sample ID: 1400 Quant Type: ISTD  
Method: /var/chem/msv5.i/2110118p.s.b/8260Bw5.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
14 1-3 Butadiene	0.16952	0.19571	0.19571	0.010	15.44774	40.00000	Averaged
10 Ethyl Ether	0.10374	0.13897	0.13897	0.010	33.95814	40.00000	Averaged
16 Allyl chloride	0.14511	0.17182	0.17182	0.010	18.41230	40.00000	Averaged
23 tert-Butyl Alcohol	0.02551	0.03073	0.03073	0.010	20.48330	40.00000	Averaged
24 Acetonitrile	0.03466	0.04099	0.04099	0.010	18.27230	40.00000	Averaged
25 Isopropyl Ether	0.59830	0.57559	0.57559	0.050	-3.79489	40.00000	Averaged
26 Chloroprene	0.22434	0.24942	0.24942	0.010	11.17874	40.00000	Averaged
37 Ethyl Acetate	0.31050	0.37163	0.37163	0.010	19.68781	40.00000	Averaged
38 Tetrahydrofuran	0.11417	0.13214	0.13214	0.010	15.73414	40.00000	Averaged
41 sec-Butanol	0.02999	0.03712	0.03712	0.010	23.77288	40.00000	Averaged
44 2-2-4 trimethyl Pentane	66.95624	50.00000	0.50782	0.010	33.91247	40.00000	Linear
46 Propionitrile	0.04516	0.05751	0.05751	0.010	27.35623	40.00000	Averaged
47 Methacrylonitrile	0.20822	0.22783	0.22783	0.010	9.41716	40.00000	Averaged
50 Isobutyl Alcohol	0.01606	0.01615	0.01615	0.010	0.55888	40.00000	Averaged
56 n-Butanol	0.01116	0.01306	0.01306	0.010	17.06802	40.00000	Averaged
58 2-3 Dichloro-1-Propene	0.29171	0.30719	0.30719	0.010	5.30864	40.00000	Averaged
62 Methyl methacrylate	0.18792	0.20185	0.20185	0.010	7.41143	40.00000	Averaged
63 1,4- Dioxane	0.00273	0.00335	0.00335	0.001	22.65092	40.00000	Averaged
70 2-nitropropane	0.08476	0.10776	0.10776	0.010	27.13617	40.00000	Averaged
74 Ethyl Methacrylate	0.53023	0.51894	0.51894	0.010	-2.12759	40.00000	Averaged
78 1-nitropropane	0.05695	0.07044	0.07044	0.010	23.69083	40.00000	Averaged
102 Cyclohexanone	0.11253	0.12336	0.12336	0.010	9.62024	40.00000	Averaged
105 Pentachloroethane	0.29737	0.28830	0.28830	0.010	-3.05192	40.00000	Averaged
109 Dicylopentadiene	2.09377	2.41885	2.41885	0.010	15.52627	40.00000	Averaged
121 Benzal Chloride	+++	0.16400	0.16400	0.010	+++	40.00000	Averaged

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GCAL

Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Lab File ID ( Standard ): 2110116/a8959

Date Analyzed: 01/16/11

Instrument ID: MSV11

Time: 0859

GC Column: RTX-VMS-30 ID: .25 (mm)

Heated Purge: (Y/N) N

Analytical Batch: 449012

		IS 1		IS 2		IS 3	
		Area	RT	Area	RT	Area	RT
STANDARD		102426	8.6	96252	11.82	267435	5.28
EPA Sample		#	#	#	#	#	#
1.	LCS913049	104129	8.6	99408	11.82	264793	5.28
2.	LCSD913050	105635	8.6	99611	11.82	269364	5.28
3.	MB913048	98814	8.59	85561	11.82	261369	5.28
4.	EQUIPMENT BLANK	94718	8.6	80672	11.82	258968	5.28
5.	TRIP BLANK 1	96155	8.6	81442	11.82	259547	5.28
6.	TRIP BLANK 2	95452	8.6	79675	11.82	256335	5.28

IS 1 ID : Chlorobenzene-d5

IS 2 ID : 1,4-Dichlorobenzene-d4

IS 3 ID : Fluorobenzene

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RTLOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk

\* Value outside of QC limits

8A  
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Lab File ID (Standard): 2110116/a8960s Date Analyzed: 01/16/11 Time: 0923  
 Instrument ID: MSV11 GC Column: RTX-VMS-30M ID: .25 (mm)  
 Analytical Batch: 449013 Heated Burge: (Y/N) Y

	IS1		IS2		IS3	
	Area	RT	Area	RT	Area	RT
STANDARD	264793	5.28	104129	8.60	99408	11.82
<b>EPA Sample No.</b>	<b>#</b>	<b>#</b>	<b>#</b>	<b>#</b>	<b>#</b>	<b>#</b>
LCS913052	264793	5.28	104129	8.60	99408	11.82
LCSD913053	269364	5.28	105635	8.60	99611	11.82
MB913051	233158	5.28	89050	8.59	88124	11.82
T-15-F	243009	5.28	92304	8.60	91030	11.82
T-15-F MS	261850	5.28	103314	8.60	97972	11.82
T-15-F MSD	266506	5.28	105177	8.60	102063	11.82
T-21-F	229819	5.28	89091	8.60	89516	11.82
NC-0-0.3	236281	5.28	92486	8.60	94286	11.82
T-6-NORTH	243988	5.28	95200	8.60	99118	11.82
SC-W	247517	5.28	97285	8.60	98863	11.82
SC-E	255725	5.28	98817	8.60	99437	11.82
T-6-FLOOR	272865	5.28	103268	8.60	94113	11.82
T-6-EAST	268644	5.28	101510	8.60	90410	11.82
T-6-SOUTH	266446	5.28	100967	8.60	86231	11.82
BLIND DUP	262564	5.28	100173	8.60	87929	11.82

IS 1 ID: Fluorobenzene  
 IS 2 ID: Chlorobenzene d5  
 IS 3 ID: 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area  
 AREA LOWER LIMIT = -50 % of internal standard area  
 RT UPPER LIMIT = +0.50 minutes of internal standard RT  
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag internal standard values with an asterisk.  
 \* Values outside of QC limits.

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GCAL

Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Lab File ID ( Standard ): 2110118p/k9905

Date Analyzed: 01/18/11

Instrument ID: MSV5

Time: 1319

GC Column: RTX-VMS-30 ID: .25 (mm)

Heated Purge: (Y/N) N

Analytical Batch: 449157

		IS 1		IS 2		IS 3	
		Area	RT	Area	RT	Area	RT
STANDARD		448195	9.85	363706	11.93	915279	7.07
EPA Sample		#	#	#	#	#	#
1.	LCS913706	448195	9.85	363706	11.93	915279	7.07
2.	LCSD913707	439975	9.85	376202	11.93	907873	7.07
3.	MB913705	425374	9.86	320520	11.93	863672	7.07
4.	T-2-WEST	432364	9.84	327568	11.92	882603	7.06

IS 1 ID : Chlorobenzene-d5

IS 2 ID : 1,4-Dichlorobenzene-d4

IS 3 ID : Fluorobenzene

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RTLOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk

\* Value outside of QC limits

# VOLATILE SOLIDS PREPARATION

SAMPLE NUMBER	SAMPLE WEIGHT (g)	SODIUM BISULFATE WEIGHT (g)	LOT #	AMOUNT OF WATER (ml)	AMOUNT OF METHANOL (ml)	LOT #	SURROGATE/ SPIKE	DATE/ TIME	ANALYST	COMMENTS
<del>21101140501A</del>	52.11	N/A	N/A	N/A	N/A	N/A	N/A	10:34	FDS	Terra core
<del>21101140501B</del>	35.36							10:34		
<del>21101140501C</del>	53.07							10:34		
<del>21101140501D</del>	35.83							10:34		
<del>21101140501E</del>	47.63							10:34		
<del>21101140501F</del>	33.55							10:34		
<del>21101140501G</del>	49.38							10:34		
<del>21101140501H</del>	35.58							10:34		
<del>21101140501I</del>	47.85							10:34		
<del>21101140501J</del>	35.52							10:34		
<del>21101140501K</del>	41.74							10:34		
<del>21101140501L</del>	33.52							10:34		
<del>21101140501M</del>	45.40							10:34		
<del>21101140501N</del>	35.76							10:34		
<del>21101140501O</del>	45.95							10:34		
<del>21101140501P</del>	35.96							10:34		
<del>21101140501Q</del>	45.28							10:34		
<del>21101140501R</del>	33.38							10:34		
<del>21101140501S</del>	44.52							10:34		
<del>21101140501T</del>	35.57							10:34		
<del>21101140501U</del>	44.40							10:34		
<del>21101140501V</del>	35.27							10:34		
<del>21101140501W</del>	42.40							10:34		
<del>21101140501X</del>	33.17							10:34		
<del>21101140501Y</del>	5.17	N/A	N/A	500	N/A	N/A	N/A	11:15	CLH	
<del>21101140501Z</del>	5.63							11:16		
<del>21101140502A</del>	5.58							11:17		
21101140501A	40.54	NA	NA	NA	NA	NA	NA	12:30	RJU	Terra core
21101140501B	35.04							12:31		
21101140501C	41.54							12:32		
21101140501D	35.24							12:32		
21101140501E	39.60							12:33		
21101140501F	33.42							12:34		
21101140501G	41.57							12:34		
21101140501H	35.53							12:35		
21101140501I	40.84							12:35		
21101140501J	35.54							12:35		
21101140501K	38.58							12:35		
21101140501L	33.61							12:35		

# VOLATILE SOLIDS PREPARATION

SAMPLE NUMBER	SAMPLE WEIGHT (g)	SODIUM BISULFATE WEIGHT (g)	LOT #	AMOUNT OF WATER (ml)	AMOUNT OF METHANOL (ml)	LOT #	SURROGATE/ SPIKE	DATE/ TIME	ANALYST	COMMENTS
21101140503 A	40.56 35.84	NA	NA	NA	NA	NA	NA	12:36 1/14/11	BSU	Terracore
21101140503 B	42.05 35.70							12:37 1/14/11		
21101140503 C	39.88 33.85	6.03						12:38 1/14/11		
21101140504 A	41.70 36.05							12:39 1/14/11		
21101140504 B	41.59 35.58							12:40 1/14/11		
21101140504 C	38.83 33.12	5.81						12:41 1/14/11		
21101140505 A	40.74 35.38							12:42 1/14/11		
21101140505 B	40.65 35.60							12:43 1/14/11		
21101140505 C	38.18 33.47	4.71						12:44 1/14/11		
21101140506 A	41.27 35.30							12:45 1/14/11		
21101140506 B	41.66 35.52							12:46 1/14/11		
21101140506 C	39.29 33.08	6.21						12:47 1/14/11		
21101140507 A	39.43 35.31	NA	NA	NA	NA	NA	NA	12:48 1/14/11	BSU	Terracore
21101140507 B	41.89 36.44							12:49 1/14/11		
21101140507 C	37.56 32.79	4.77						12:50 1/14/11		
21101140508 A	40.12 34.92							12:51 1/14/11		
21101140508 B	40.96 35.66							12:52 1/14/11		
21101140508 C	38.34 33.21	5.13						12:53 1/14/11		
21101140509 A	41.30 35.89							12:54 1/14/11		
21101140509 B	41.17 35.87							12:55 1/14/11		
21101140509 C	38.42 33.19	5.23						12:56 1/14/11		

# VOLATILE SOLIDS PREPARATION

SAMPLE NUMBER	SAMPLE WEIGHT (g)	SODIUM BISULFATE WEIGHT (g)	LOT #	AMOUNT OF WATER (ml)	AMOUNT OF METHANOL (ml)	LOT #	SURROGATE/ SPIKE	DATE/ TIME	ANALYST	COMMENTS
21101140510 A	42.07 35.80	N/A	N/A	N/A	N/A	N/A	N/A	14:14 1.14.10	EDS	Terracore
21101140510 B	41.72 35.77	↓	↓	↓	↓	↓	↓	14:14 1.14.11	↓	↓
21101140510 C	39.50 33.63	5.87	↓	↓	↓	↓	↓	14:14 1.14.11	↓	↓
21101140511 A	39.72 35.19	↓	↓	↓	↓	↓	↓	14:18 1.14.11	↓	↓
21101140511 B	40.47 35.35	↓	↓	↓	↓	↓	↓	14:18 1.14.11	↓	↓
21101140511 C	39.27 33.56	5.71	↓	↓	↓	↓	↓	14:18 1.14.11	↓	↓
21101140512 A	41.47 35.10	↓	↓	↓	↓	↓	↓	14:21 1.14.11	↓	↓
21101140512 B	42.47 35.67	↓	↓	↓	↓	↓	↓	14:21 1.14.11	↓	↓
21101140512 C	39.44 33.59	5.85	↓	↓	↓	↓	↓	14:21 1.14.11	↓	↓
21101140513 A	40.72 35.77	↓	↓	↓	↓	↓	↓	14:23 1.14.11	↓	↓
21101140513 B	40.77 35.53	↓	↓	↓	↓	↓	↓	14:23 1.14.11	↓	↓
21101140513 C	38.22 33.29	4.93	↓	↓	↓	↓	↓	14:23 1.14.11	↓	↓
<del>21101140514 A</del>	35.83 35.56	N/A	N/A	N/A	N/A	N/A	N/A	14:44 1.14.11	EDS	Terracore
<del>21101140514 B</del>	43.03 35.86	↓	↓	↓	↓	↓	↓	14:44 1.14.11	↓	↓
<del>21101140514 C</del>	39.48 32.40	↓	↓	↓	↓	↓	↓	14:44 1.14.11	↓	↓
<del>21101140515 A</del>	42.82 35.32	↓	↓	↓	↓	↓	↓	14:46 1.14.11	↓	↓
<del>21101140515 B</del>	42.41 35.67	↓	↓	↓	↓	↓	↓	14:46 1.14.11	↓	↓
<del>21101140515 C</del>	40.41 33.57	↓	↓	↓	↓	↓	↓	14:46 1.14.11	↓	↓
<del>21101140516 A</del>	44.52 35.51	↓	↓	↓	↓	↓	↓	14:49 1.14.11	↓	↓
<del>21101140516 B</del>	42.28 36.02	↓	↓	↓	↓	↓	↓	14:49 1.14.11	↓	↓
<del>21101140516 C</del>	39.03 33.20	↓	↓	↓	↓	↓	↓	14:49 1.14.11	↓	↓

# LABORATORY CHRONICLE: MSV DEPARTMENT

Date: 14-JAN-2011      Standard      Conc ppm  
Instrument: msv11.i      BFB IS/SS      50      6-99-2      05/21/11  
Analyst(s): RJO      8260 IS/SS      50      6-99-2      05/21/11  
APP9-2      50      6-100-9      07/07/11  
APP9-1      50      6-97-3      05/16/11  
THF      50      6-97-9      05/19/11  
APP9-2 ICV      50      6-96-8      05/05/11  
APP9-1 ICV      50      6-98-3      02/14/11  
THF      ICV      50      6-93-11      04/06/11

Sample ID	Comments	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS
1000	RR	a8910.d	0.00 ml	14-JAN-2011 08:52	1.000	RJO	2
1000	RR	a8911.d	0.00 ml	14-JAN-2011 09:24	1.000	RJU	2
1000		a8912BFB.d	0.00 ml	14-JAN-2011 09:48	1.000	RJU	2
1000		a8912BFBS.d	0.00 ml	14-JAN-2011 09:48	1.000	RJU	2
1400		a8913.d	5.00 ml	14-JAN-2011 10:25	1.000	RJU	21
1208		a8914.d	5.00 ml	14-JAN-2011 11:09	1.000	RJU	22
1201		a8915.d	5.00 ml	14-JAN-2011 11:41	1.000	RJU	23
1206		a8916.d	5.00 ml	14-JAN-2011 12:09	1.000	RJU	24
1202		a8917.d	5.00 ml	14-JAN-2011 12:41	1.000	RJU	25
1400		a8918CCV.d	5.00 ml	14-JAN-2011 13:15	1.000	RJU	26
1203		a8918.d	5.00 ml	14-JAN-2011 13:15	1.000	RJU	26
1204		a8919.d	5.00 ml	14-JAN-2011 13:48	1.000	RJU	27
1205		a8920.d	5.00 ml	14-JAN-2011 14:28	1.000	RJU	28
BLANK		a8921.d	5.00 ml	14-JAN-2011 14:55	1.000	RJU	29
1600		a8922.d	5.00 ml	14-JAN-2011 15:30	1.000	RJU	30
912979		a8923.d	5.00 g	14-JAN-2011 16:08	50.000	RJU	31
912980		a8924.d	5.00 g	14-JAN-2011 16:41	50.000	RJU	32
SMB		a8925.d	5.00 ml	14-JAN-2011 17:14	50.000	RJU	33
912978		a8926.d	5.00 g	14-JAN-2011 17:38	50.000	RJU	34
21101103001		a8927.d	5.05 g	14-JAN-2011 18:14	50.000	RJU	35

TUNE = 21:48

# LABORATORY CHRONICLE: MSV DEPARTMENT

Date: 15-JAN-2011	Standard	Conc ppm	ID	EXP
Instrument: msv11.i	BFB IS/SS	50	6-99-2	05/21/11
Analyst(s): RJU	8260 IS/SS	50	6-99-2	05/21/11
	8260	50	6-100-11	01/28/11
	AC/AC/VA	250/50	6-100-10	03/10/11
	CVE	50	6-100-3	06/29/11
	Heptane	250	6-98-2	05/28/11
	8260 ICV	50	6-99-4	06/22/11
	AC/AC/VA ICV	250/50	6-98-12	01/17/11
	CVE ICV	50	6-89-11	02/11/11
	Heptane ICV	250	6-93-10	04/06/11

Sample ID	Comments	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS
1000		a8930BFB.d	0.00 ml	15-JAN-2011 08:16	1.000	RJU	2
1000		a8930BFB.d	0.00 ml	15-JAN-2011 08:16	1.000	RJU	2
1209	RR	a8931.d	5.00 ml	15-JAN-2011 08:58	1.000	RJU	19
1208	RR	a8932.d	5.00 ml	15-JAN-2011 09:32	1.000	RJU	20
1201		a8933.d	5.00 ml	15-JAN-2011 09:57	1.000	RJU	21
1201		a8933D.d	5.00 ml	15-JAN-2011 09:57	1.000	RJU	21
1206		a8934.d	5.00 ml	15-JAN-2011 10:21	1.000	RJU	22
1206		a8934D.d	5.00 ml	15-JAN-2011 10:21	1.000	RJU	22
1202		a8935.d	5.00 ml	15-JAN-2011 10:45	1.000	RJU	23
1202		a8935D.d	5.00 ml	15-JAN-2011 10:45	1.000	RJU	23
1203		a8936.d	5.00 ml	15-JAN-2011 11:09	1.000	RJU	24
1203		a8936D.d	5.00 ml	15-JAN-2011 11:09	1.000	RJU	24
1204		a8937.d	5.00 ml	15-JAN-2011 11:32	1.000	RJU	25
1204		a8937D.d	5.00 ml	15-JAN-2011 11:32	1.000	RJU	25
1205		a8938.d	5.00 ml	15-JAN-2011 11:55	1.000	RJU	26
1205		a8938D.d	5.00 ml	15-JAN-2011 11:55	1.000	RJU	26
BLANK		a8939.d	5.00 ml	15-JAN-2011 12:19	1.000	RJU	27
BLANK		a8940.d	5.00 ml	15-JAN-2011 12:42	1.000	RJU	27
1208		a8941.d	5.00 ml	15-JAN-2011 13:06	1.000	RJU	28
1208		a8941D.d	5.00 ml	15-JAN-2011 13:06	1.000	RJU	28
1210	NOT USED	a8942.d	5.00 ml	15-JAN-2011 14:00	1.000	RJU	29
1600	RR	a8943.d	5.00 ml	15-JAN-2011 14:24	1.000	RJU	30
1600		a8944.d	5.00 ml	15-JAN-2011 14:59	1.000	RJU	31
1600		a8944D.d	5.00 ml	15-JAN-2011 14:59	1.000	RJU	31
913039		a8945.d	5.00 ml	15-JAN-2011 15:33	1.000	RJU	29
913040		a8946.d	5.00 ml	15-JAN-2011 16:07	1.000	RJU	30
MB		a8947.d	5.00 ml	15-JAN-2011 16:33	1.000	RJU	31
913038		a8948.d	5.00 ml	15-JAN-2011 17:03	1.000	RJU	32
21101121306		a8949.d	5.00 ml	15-JAN-2011 17:27	1.000	RJU	33
21101121301		a8950.d	5.00 ml	15-JAN-2011 17:50	1.000	RJU	34
21101121302		a8951.d	5.00 ml	15-JAN-2011 18:13	1.000	RJU	35
21101121303		a8952.d	5.00 ml	15-JAN-2011 18:36	1.000	RJU	36
21101121304		a8953.d	5.00 ml	15-JAN-2011 19:00	1.000	RJU	37
21101121305	LRNO WITH FOLLOWING	a8954.d	5.00 ml	15-JAN-2011 19:24	5.000	RJU	38
21101121305	LRNO WITH ABOVE	a8955.d	5.00 ml	15-JAN-2011 19:47	1.000	RJU	38
BLANK		a8956.d	5.00 ml	15-JAN-2011 20:10	1.000	RJU	39

TUNE = 20:16

# LABORATORY CHRONICLE: MSV DEPARTMENT

Date: 16-JAN-2011	Standard	Conc ppm	ID	EXP
Instrument: msv11.i	BFB IS/SS	50	6-99-2	05/21/11
Analyst(s): RJU	8260 IS/SS	50	6-99-2	05/21/11
	8260	50	6-100-11	01/28/11
	AC/AC/VA	250/50	6-100-10	03/10/11
	CVE	50	6-100-3	06/29/11
	Heptane	250	6-98-2	05/28/11
	APP9-1	50	6-97-3	05/16/11
	APP9-2	50	6-100-9	07/07/11
	THF	50	6-97-9	05/19/11

Sample ID	Comments	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS
1000	RR	a8958.d	0.00 ml	16-JAN-2011 08:11	1.000	RJU	2
1000		a8958s.d	0.00 ml	16-JAN-2011 08:11	1.000	RJU	2
1400	APP9	a8959.d	5.00 ml	16-JAN-2011 08:59	1.000	RJU	39
1400	APP9	a8959s.d	5.00 ml	16-JAN-2011 08:59	1.000	RJU	39
1400		a8960.d	5.00 ml	16-JAN-2011 09:23	1.000	RJU	40
913049		a8960L.d	5.00 ml	16-JAN-2011 09:23	1.000	RJU	40
1400		a8960s.d	5.00 ml	16-JAN-2011 09:23	1.000	RJU	40
913052		a8960sL.d	5.00 g	16-JAN-2011 09:23	50.000	RJU	40
913050		a8961.d	5.00 ml	16-JAN-2011 09:46	1.000	RJU	41
913053		a8961s.d	5.00 g	16-JAN-2011 09:46	50.000	RJU	41
MB		a8962.d	5.00 ml	16-JAN-2011 10:09	1.000	RJU	42
913048		a8963.d	5.00 ml	16-JAN-2011 10:33	1.000	RJU	42
913051		a8964.d	5.00 g	16-JAN-2011 10:55	50.000	RJU	43
21101140501		a8965.d	6.18 g	16-JAN-2011 11:18	50.000	RJU	44
21101140514		a8966.d	5.00 ml	16-JAN-2011 11:42	1.000	RJU	45
21101140515		a8967.d	5.00 ml	16-JAN-2011 12:05	1.000	RJU	46
21101140516		a8968.d	5.00 ml	16-JAN-2011 12:28	1.000	RJU	47
21101143701	LRNO WITH 20/2	a8969.d	5.00 ml	16-JAN-2011 12:51	100.000	RJU	48
21101143701	LRNO WITH 100/2	a8970.d	5.00 ml	16-JAN-2011 13:14	20.000	RJU	49
21101143701	LRNO WITH 100/20	a8971.d	5.00 ml	16-JAN-2011 13:37	2.000	RJU	50
21101140502	MS	a8972.d	4.91 g	16-JAN-2011 14:01	50.000	RJU	51
21101140503	MSD	a8973.d	6.03 g	16-JAN-2011 14:25	50.000	RJU	52
BLANK		a8974.d	5.00 ml	16-JAN-2011 14:49	1.000	RJU	53
21101144101	DILUTED DUE TO NT	a8975.d	5.01 g	16-JAN-2011 15:14	10000.000	RJU	54
21101142402		a8976.d	5.00 g	16-JAN-2011 15:39	1000000.000	RJU	55
21101140504		a8977.d	5.81 g	16-JAN-2011 16:03	50.000	RJU	56
21101140505		a8978.d	4.71 g	16-JAN-2011 16:27	50.000	RJU	57
21101140510		a8979.d	5.87 g	16-JAN-2011 16:51	50.000	RJU	58
21101140512	DILUTED DUE TO MATRIX	a8980.d	5.85 g	16-JAN-2011 17:15	50.000	RJU	59
21101140513		a8981.d	4.93 g	16-JAN-2011 17:39	50.000	RJU	60
21101140507		a8982.d	4.77 g	16-JAN-2011 18:09	100.000	CLH	61
21101140506	RR, 250X	a8983.d	6.21 g	16-JAN-2011 18:33	1000.000	CLH	62
21101140508		a8984.d	5.13 g	16-JAN-2011 18:57	10000.000	CLH	63
21101140509		a8985.d	5.23 g	16-JAN-2011 19:22	10000.000	CLH	64
21101140511		a8986.d	5.71 g	16-JAN-2011 19:46	10000.000	CLH	65
BLANK		a8987.d	5.00 g	16-JAN-2011 20:10	1.000	CLH	66

# LABORATORY CHRONICLE: MSV DEPARTMENT

Date: 01-JAN-2011	Standard	Conc ppm		
Instrument: msv5.i	BFB IS/SS	50	6-96-6	05/04/11
Analyst(s): JCK	8260 IS/SS	50	6-96-6	05/04/11
	APP9-2	50	6-97-2	05/12/11
	APP9-1	50	6-97-3	05/16/11
	THF	50	6-97-9	05/19/11
	THF ICV	50	6-93-11	04/06/11
	APP9-2 ICV	50	6-96-8	05/05/11
	APP9-1 ICV	50	6-98-3	02/14/11

Sample ID	Comments	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS
BLANK		k9644.d	0.00 ml	01-JAN-2011 13:18	1.000	JCK	2
1000		k9745.d	0.00 ml	07-JAN-2011 10:24	1.000	JCK	2
1207		k9746.d	5.00 ml	07-JAN-2011 11:14	1.000	JCK	1
1201		k9747.d	5.00 ml	07-JAN-2011 11:36	1.000	JCK	2
1206	RR	k9748.d	5.00 ml	07-JAN-2011 11:58	1.000	JCK	3
1202		k9749.d	5.00 ml	07-JAN-2011 12:21	1.000	JCK	4
1203		k9750.d	5.00 ml	07-JAN-2011 12:43	1.000	JCK	5
1204		k9751.d	5.00 ml	07-JAN-2011 13:06	1.000	JCK	6
1205		k9752.d	5.00 ml	07-JAN-2011 13:30	1.000	JCK	7
BLANK		k9753.d	5.00 ml	07-JAN-2011 13:53	1.000	JCK	8
1600	RR	k9754.d	5.00 ml	07-JAN-2011 14:59	1.000	JCK	9
1206		k9755.d	5.00 ml	07-JAN-2011 15:42	1.000	JCK	10
1600		k9756.d	5.00 ml	07-JAN-2011 16:04	1.000	JCK	11

TUNE = 01:18

# LABORATORY CHRONICLE: MSV DEPARTMENT

Date: 07-JAN-2011	Standard	Conc ppm		
Instrument: msv5.i	BFB IS/SS	50	6-99-2	05/21/11
Analyst(s): JCK	8260 IS/SS	50	6-99-2	05/21/11
	8260	50	6-100-8	01/17/11
	Ac/Ac	250/50	6-100-7	03/01/11
	CVE	50	6-100-3	06/29/11
	8260 ICV	50	6-99-4	06/22/11
	AC/AC ICV	250/50	6-98-12	01/17/11
	CVE ICV	50	6-89-11	02/11/11

Sample ID	Comments	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS
1000		k9757.d	0.00 ml	07-JAN-2011 17:02	1.000	JCK	2
1207	8260 ICAL	k9758.d	5.00 ml	07-JAN-2011 18:08	1.000	JCK	1
1201		k9759.d	5.00 ml	07-JAN-2011 18:30	1.000	JCK	2
1206		k9760.d	5.00 ml	07-JAN-2011 18:54	1.000	JCK	3
1202		k9761.d	5.00 ml	07-JAN-2011 19:16	1.000	JCK	4
1203		k9762.d	5.00 ml	07-JAN-2011 19:38	1.000	JCK	5
1204		k9763.d	5.00 ml	07-JAN-2011 20:01	1.000	JCK	6
1205		k9764.d	5.00 ml	07-JAN-2011 20:23	1.000	JCK	7
BLANK		k9765.d	5.00 ml	07-JAN-2011 20:45	1.000	JCK	8
1600		k9766.d	5.00 ml	07-JAN-2011 21:07	1.000	JCK	9
1600	NOT USED	k9767.d	5.00 ml	07-JAN-2011 21:29	1.000	JCK	10
BLANK		k9768.d	5.00 ml	07-JAN-2011 21:52	1.000	JCK	11

TUNE = 05:02

# LABORATORY CHRONICLE: MSV DEPARTMENT

Date: 18-JAN-2011	Standard	Conc ppm	
Instrument: msv5.i	BFB IS/SS	50	6-99-2 05/21/11
Analyst(s): CLH	8260 IS/SS	50	6-99-2 05/21/11
	8260	50	6-100-11 01/28/11
	Ac/Ac	250/50	6-100-12 03/16/11
	CVE	50	6-100-3 06/29/11
	APP9-2	50	6-100-9 07/07/11
	APP9-1	50	6-97-3 05/16/11
	THF	50	6-97-9 05/19/11

Sample ID	Comments	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS
1000		k9903bfb.d	0.00 ml	18-JAN-2011 12:33	1.000	CLH	2
1000		k9903sbfb.d	0.00 ml	18-JAN-2011 12:33	1.000	CLH	2
BLANK		k9904.d	5.00 ml	18-JAN-2011 12:56	1.000	CLH	5
1400		k9905.d	5.00 ml	18-JAN-2011 13:19	1.000	CLH	2
913709		k9905L.d	5.00 ml	18-JAN-2011 13:19	1.000	CLH	2
1400		k9905s.d	5.00 ml	18-JAN-2011 13:19	1.000	CLH	2
913706		k9905sL.d	5.00 g	18-JAN-2011 13:19	50.000	CLH	2
913710		k9906.d	5.00 ml	18-JAN-2011 13:42	1.000	CLH	3
913707		k9906s.d	5.00 g	18-JAN-2011 13:42	50.000	CLH	3
1400		k9907.d	5.00 ml	18-JAN-2011 14:09	1.000	CLH	4
1400		k9907s.d	5.00 ml	18-JAN-2011 14:09	1.000	CLH	4
MB		k9908.d	5.00 ml	18-JAN-2011 14:32	1.000	CLH	5
913705		k9909.d	5.00 g	18-JAN-2011 14:55	50.000	CLH	6
913708		k9910.d	5.00 ml	18-JAN-2011 15:19	1.000	CLH	7
21101140506		k9911.d	6.21 g	18-JAN-2011 15:41	250.000	CLH	8
21101140602		k9912.d	5.00 ml	18-JAN-2011 16:04	40.000	CLH	9
21101143333		k9913.d	5.00 ml	18-JAN-2011 16:26	1.000	CLH	10
21101171601		k9914.d	5.00 ml	18-JAN-2011 16:48	20.000	CLH	11
BLANK		k9915.d	5.00 ml	18-JAN-2011 17:11	1.000	CLH	12
913803		k9916.d	5.00 ml	18-JAN-2011 17:33	40.000	CLH	34
913804		k9917.d	5.00 ml	18-JAN-2011 17:56	40.000	CLH	35
912982		k9918.d	5.00 ml	18-JAN-2011 18:19	40.000	CLH	36
21101172801	LRNO WITH FOLLOWING	k9919.d	5.00 ml	18-JAN-2011 18:41	20.000	CLH	13
21101172801	LRNO WITH ABOVE	k9920.d	5.00 ml	18-JAN-2011 19:05	2.000	CLH	14
BLANK		k9921.d	5.00 ml	18-JAN-2011 19:29	1.000	CLH	15
BLANK		k9922.d	5.00 ml	18-JAN-2011 19:52	1.000	CLH	16
21101171501	LRNO WITH k9925	k9923.d	5.00 ml	18-JAN-2011 20:14	250.000	CLH	17
21101171502	LRNO WITH k9926	k9924.d	5.00 ml	18-JAN-2011 20:37	250.000	CLH	18
21101171501	LRNO WITH k9923	k9925.d	5.00 ml	18-JAN-2011 21:00	10.000	CLH	19
21101171502	LRNO WITH k9924	k9926.d	5.00 ml	18-JAN-2011 21:22	10.000	RJU	20
BLANK		k9927.d	5.00 ml	18-JAN-2011 21:45	1.000	RJU	21
BLANK		k9928.d	5.00 ml	18-JAN-2011 22:07	1.000	RJU	22
BLANK		k9929.d	5.00 ml	18-JAN-2011 22:30	1.000	RJU	23
21101170304		k9930.d	5.00 ml	18-JAN-2011 22:53	1.000	RJU	24
21101140601		k9931.d	5.00 ml	18-JAN-2011 23:15	40.000	RJU	25
21101140603		k9932.d	5.00 ml	18-JAN-2011 23:38	40.000	RJU	26

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: Solid

Sample wt/vol: 30.1 Units: g

Level: (low/med) LOW

% Moisture: 16.2 decanted: (Y/N) \_\_\_\_\_

GC Column: RTX-5MS-30 ID: .25 (mm)

Concentrated Extract Volume: 1000 (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-15-F

Contract: \_\_\_\_\_

Lab File ID: 2110114/e7980

Lab Sample ID: 21101140501

Date Collected: 01/13/11 Time: 1400

Date Received: 01/14/11

Date Extracted: 01/14/11

Date Analyzed: 01/14/11 Time: 1656

Dilution Factor: 1 Analyst: KCB

Prep Method: 3550B

Analytical Method: SW-846 8270

Instrument ID: MSSV4

Prep Batch: 448916 Analytical Batch: 448983

CONCENTRATION UNITS: mg/kg

**CAS NO. COMPOUND**

**RESULT MDL RL**

122-66-7	1,2-Diphenylhydrazine	0.393	U	0.00894	0.393
95-95-4	2,4,5-Trichlorophenol	0.393	U	0.047	0.393
88-06-2	2,4,6-Trichlorophenol	0.393	U	0.062	0.393
120-83-2	2,4-Dichlorophenol	0.393	U	0.063	0.393
105-67-9	2,4-Dimethylphenol	0.393	U	0.050	0.393
51-28-5	2,4-Dinitrophenol	1.96	U	0.211	1.96
121-14-2	2,4-Dinitrotoluene	0.393	U	0.055	0.393
606-20-2	2,6-Dinitrotoluene	0.393	U	0.023	0.393
91-58-7	2-Chloronaphthalene	0.393	U	0.021	0.393
95-57-8	2-Chlorophenol	0.393	U	0.030	0.393
91-57-6	2-Methylnaphthalene	0.079	U	0.021	0.079
88-74-4	2-Nitroaniline	1.96	U	0.044	1.96
88-75-5	2-Nitrophenol	0.393	U	0.018	0.393
91-94-1	3,3'-Dichlorobenzidine	0.785	U	0.251	0.785
99-09-2	3-Nitroaniline	1.96	U	0.048	1.96
534-52-1	2-Methyl-4,6-dinitrophenol	1.96	U	0.039	1.96
101-55-3	4-Bromophenyl-phenylether	0.393	U	0.035	0.393
59-50-7	4-Chloro-3-methylphenol	0.393	U	0.031	0.393
106-47-8	4-Chloroaniline	0.393	U	0.039	0.393
7005-72-3	4-Chlorophenyl-phenylether	0.393	U	0.044	0.393
100-01-6	4-Nitroaniline	1.96	U	0.073	1.96
100-02-7	4-Nitrophenol	1.96	U	0.136	1.96
83-32-9	Acenaphthene	0.079	U	0.022	0.079
208-96-8	Acenaphthylene	0.079	U	0.013	0.079
98-86-2	Acetophenone	0.393	U	0.024	0.393
62-53-3	Aniline	0.393	U	0.021	0.393
120-12-7	Anthracene	0.079	U	0.014	0.079
1912-24-9	Atrazine (Aatrex)	0.785	U	0.058	0.785
100-52-7	Benzaldehyde	0.785	U	0.035	0.785

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: Solid

Sample wt/vol: 30.1 Units: g

Level: (low/med) LOW

% Moisture: 16.2 decanted: (Y/N) \_\_\_\_\_

GC Column: RTX-5MS-30 ID: .25 (mm)

Concentrated Extract Volume: 1000 (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-15-F

Contract: \_\_\_\_\_

Lab File ID: 2110114/e7980

Lab Sample ID: 21101140501

Date Collected: 01/13/11 Time: 1400

Date Received: 01/14/11

Date Extracted: 01/14/11

Date Analyzed: 01/14/11 Time: 1656

Dilution Factor: 1 Analyst: KCB

Prep Method: 3550B

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

CAS NO.	COMPOUND	RESULT	MDL	RL
92-87-5	Benzidine	1.96	U	1.96
56-55-3	Benzo(a)anthracene	0.079	U	0.017
50-32-8	Benzo(a)pyrene	0.079	U	0.023
205-99-2	Benzo(b)fluoranthene	0.393	U	0.012
191-24-2	Benzo(g,h,i)perylene	0.393	U	0.011
207-08-9	Benzo(k)fluoranthene	0.393	U	0.018
65-85-0	Benzoic acid	1.96	U	0.136
100-51-6	Benzyl alcohol	0.393	U	0.046
92-52-4	Biphenyl	0.393	U	0.013
111-91-1	Bis(2-Chloroethoxy)methane	0.393	U	0.022
111-44-4	Bis(2-Chloroethyl)ether	0.393	U	0.030
108-60-1	bis(2-Chloroisopropyl)ether	0.393	U	0.020
117-81-7	bis(2-ethylhexyl)phthalate	0.079	U	0.015
85-68-7	Butylbenzylphthalate	0.393	U	0.00828
105-60-2	Caprolactam	0.393	U	0.042
86-74-8	Carbazole	0.393	U	0.028
218-01-9	Chrysene	0.393	U	0.013
84-74-2	Di-n-butylphthalate	0.393	U	0.00948
117-84-0	Di-n-octylphthalate	0.393	U	0.013
53-70-3	Dibenz(a,h)anthracene	0.079	U	0.011
132-64-9	Dibenzofuran	0.393	U	0.014
84-66-2	Diethylphthalate	0.393	U	0.036
131-11-3	Dimethyl-phthalate	0.393	U	0.00870
206-44-0	Fluoranthene	0.017	J	0.00869
86-73-7	Fluorene	0.079	U	0.012
118-74-1	Hexachlorobenzene	0.393	U	0.047
77-47-4	Hexachlorocyclopentadiene	0.393	U	0.059
67-72-1	Hexachloroethane	0.393	U	0.058
193-39-5	Indeno(1,2,3-cd)pyrene	0.393	U	0.016

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30.1 Units: g  
 Level: (low/med) LOW  
 % Moisture: 16.2 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-15-F  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7980  
 Lab Sample ID: 21101140501  
 Date Collected: 01/13/11 Time: 1400  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1656  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

CAS NO.	COMPOUND	RESULT		MDL	RL
78-59-1	Isophorone	0.393	U	0.013	0.393
98-95-3	Nitrobenzene	0.393	U	0.018	0.393
87-86-5	Pentachlorophenol	1.96	U	0.032	1.96
85-01-8	Phenanthrene	0.079	U	0.016	0.079
108-95-2	Phenol	0.393	U	0.019	0.393
129-00-0	Pyrene	0.393	U	0.055	0.393
110-86-1	Pyridine	0.393	U	0.022	0.393
1319-77-3M	m,p-Cresol	0.393	U	0.069	0.393
621-64-7	N-Nitroso-di-n-propylamine	0.079	U	0.020	0.079
62-75-9	N-Nitrosodimethylamine	0.393	U	0.020	0.393
86-30-6	N-Nitrosodiphenylamine	0.393	U	0.012	0.393
95-48-7	o-Cresol	0.393	U	0.012	0.393

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: Solid

Sample wt/vol: 30 Units: g

Level: (low/med) LOW

% Moisture: 16.2 decanted: (Y/N) \_\_\_\_\_

GC Column: RTX-5MS-30 ID: .25 (mm)

Concentrated Extract Volume: 1000 (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-15-F MS

Contract: \_\_\_\_\_

Lab File ID: 2110114/e7981

Lab Sample ID: 21101140502

Date Collected: 01/13/11 Time: 1400

Date Received: 01/14/11

Date Extracted: 01/14/11

Date Analyzed: 01/14/11 Time: 1713

Dilution Factor: 1 Analyst: KCB

Prep Method: 3550B

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

122-66-7	1,2-Diphenylhydrazine	3.52		0.00897	0.394
95-95-4	2,4,5-Trichlorophenol	3.19		0.047	0.394
88-06-2	2,4,6-Trichlorophenol	2.96		0.062	0.394
120-83-2	2,4-Dichlorophenol	2.96		0.063	0.394
105-67-9	2,4-Dimethylphenol	3.04		0.050	0.394
51-28-5	2,4-Dinitrophenol	2.52		0.211	1.97
121-14-2	2,4-Dinitrotoluene	3.27		0.056	0.394
606-20-2	2,6-Dinitrotoluene	3.47		0.023	0.394
91-58-7	2-Chloronaphthalene	3.57		0.021	0.394
95-57-8	2-Chlorophenol	2.97		0.030	0.394
91-57-6	2-Methylnaphthalene	3.21		0.021	0.079
88-74-4	2-Nitroaniline	3.25		0.044	1.97
88-75-5	2-Nitrophenol	3.28		0.018	0.394
91-94-1	3,3'-Dichlorobenzidine	2.85		0.252	0.788
99-09-2	3-Nitroaniline	2.33		0.048	1.97
534-52-1	2-Methyl-4,6-dinitrophenol	2.94		0.039	1.97
101-55-3	4-Bromophenyl-phenylether	3.89		0.035	0.394
59-50-7	4-Chloro-3-methylphenol	2.83		0.031	0.394
106-47-8	4-Chloroaniline	1.83		0.039	0.394
7005-72-3	4-Chlorophenyl-phenylether	3.47		0.044	0.394
100-01-6	4-Nitroaniline	2.89		0.074	1.97
100-02-7	4-Nitrophenol	2.81		0.136	1.97
83-32-9	Acenaphthene	3.67		0.022	0.079
208-96-8	Acenaphthylene	4.19		0.013	0.079
98-86-2	Acetophenone	3.26		0.024	0.394
62-53-3	Aniline	2.78		0.021	0.394
120-12-7	Anthracene	3.90		0.014	0.079
1912-24-9	Atrazine (Aatrex)	5.17		0.058	0.788
100-52-7	Benzaldehyde	0.334	J	0.035	0.788

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30 Units: g  
 Level: (low/med) LOW  
 % Moisture: 16.2 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-15-F MS  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7981  
 Lab Sample ID: 21101140502  
 Date Collected: 01/13/11 Time: 1400  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1713  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

CAS NO.	COMPOUND	RESULT	MDL	RL
56-55-3	Benzo(a)anthracene	3.74	0.017	0.079
50-32-8	Benzo(a)pyrene	4.04	0.023	0.079
205-99-2	Benzo(b)fluoranthene	3.55	0.012	0.394
191-24-2	Benzo(g,h,i)perylene	3.32	0.011	0.394
207-08-9	Benzo(k)fluoranthene	3.61	0.018	0.394
65-85-0	Benzoic acid	2.23	0.136	1.97
100-51-6	Benzyl alcohol	3.21	0.046	0.394
92-52-4	Biphenyl	3.22	0.013	0.394
111-91-1	Bis(2-Chloroethoxy)methane	3.49	0.022	0.394
111-44-4	Bis(2-Chloroethyl)ether	3.39	0.030	0.394
108-60-1	bis(2-Chloroisopropyl)ether	3.28	0.020	0.394
117-81-7	bis(2-ethylhexyl)phthalate	3.52	0.015	0.079
85-68-7	Butylbenzylphthalate	3.67	0.00831	0.394
105-60-2	Caprolactam	3.12	0.042	0.394
86-74-8	Carbazole	3.39	0.028	0.394
218-01-9	Chrysene	3.57	0.013	0.394
84-74-2	Di-n-butylphthalate	3.78	0.00952	0.394
117-84-0	Di-n-octylphthalate	3.57	0.013	0.394
53-70-3	Dibenz(a,h)anthracene	3.32	0.011	0.079
132-64-9	Dibenzofuran	3.32	0.014	0.394
84-66-2	Diethylphthalate	3.61	0.036	0.394
131-11-3	Dimethyl-phthalate	3.62	0.00873	0.394
206-44-0	Fluoranthene	3.83	0.00872	0.394
86-73-7	Fluorene	3.61	0.012	0.079
118-74-1	Hexachlorobenzene	3.45	0.047	0.394
77-47-4	Hexachlorocyclopentadiene	4.18	0.059	0.394
67-72-1	Hexachloroethane	2.94	0.059	0.394
193-39-5	Indeno(1,2,3-cd)pyrene	3.32	0.016	0.394
78-59-1	Isophorone	3.43	0.013	0.394

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: T-15-F MS

Lab Code: LA024 Case No.: \_\_\_\_\_

Contract: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Lab File ID: 2110114/e7981

Matrix: Solid

Lab Sample ID: 21101140502

Sample wt/vol: 30 Units: g

Date Collected: 01/13/11 Time: 1400

Level: (low/med) LOW

Date Received: 01/14/11

% Moisture: 16.2 decanted: (Y/N) \_\_\_\_\_

Date Extracted: 01/14/11

GC Column: RTX-5MS-30 ID: .25 (mm)

Date Analyzed: 01/14/11 Time: 1713

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: KCB

Injection Volume: 1.0 (µL)

Prep Method: 3550B

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

98-95-3	Nitrobenzene	3.34		0.018	0.394
87-86-5	Pentachlorophenol	2.60		0.032	1.97
85-01-8	Phenanthrene	3.67		0.016	0.079
108-95-2	Phenol	2.95		0.019	0.394
129-00-0	Pyrene	3.90		0.055	0.394
110-86-1	Pyridine	2.24		0.022	0.394
1319-77-3M	m,p-Cresol	2.87		0.069	0.394
621-64-7	N-Nitroso-di-n-propylamine	3.43		0.020	0.079
62-75-9	N-Nitrosodimethylamine	3.18		0.020	0.394
86-30-6	N-Nitrosodiphenylamine	3.88		0.013	0.394
95-48-7	o-Cresol	2.95		0.012	0.394

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: Solid

Sample wt/vol: 30 Units: g

Level: (low/med) LOW

% Moisture: 16.2 decanted: (Y/N) \_\_\_\_\_

GC Column: RTX-5MS-30 ID: .25 (mm)

Concentrated Extract Volume: 1000 (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-15-F MSD

Contract: \_\_\_\_\_

Lab File ID: 2110114/e7982

Lab Sample ID: 21101140503

Date Collected: 01/13/11 Time: 1400

Date Received: 01/14/11

Date Extracted: 01/14/11

Date Analyzed: 01/14/11 Time: 1729

Dilution Factor: 1 Analyst: KCB

Prep Method: 3550B

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

CAS NO.	COMPOUND	RESULT	MDL	RL
122-66-7	1,2-Diphenylhydrazine	3.19	0.00897	0.394
95-95-4	2,4,5-Trichlorophenol	2.93	0.047	0.394
88-06-2	2,4,6-Trichlorophenol	2.63	0.062	0.394
120-83-2	2,4-Dichlorophenol	2.83	0.063	0.394
105-67-9	2,4-Dimethylphenol	2.84	0.050	0.394
51-28-5	2,4-Dinitrophenol	2.16	0.211	1.97
121-14-2	2,4-Dinitrotoluene	3.06	0.056	0.394
606-20-2	2,6-Dinitrotoluene	3.19	0.023	0.394
91-58-7	2-Chloronaphthalene	3.13	0.021	0.394
95-57-8	2-Chlorophenol	2.81	0.030	0.394
91-57-6	2-Methylnaphthalene	3.01	0.021	0.079
88-74-4	2-Nitroaniline	2.91	0.044	1.97
88-75-5	2-Nitrophenol	3.04	0.018	0.394
91-94-1	3,3'-Dichlorobenzidine	2.53	0.252	0.788
99-09-2	3-Nitroaniline	2.08	0.048	1.97
534-52-1	2-Methyl-4,6-dinitrophenol	2.45	0.039	1.97
101-55-3	4-Bromophenyl-phenylether	3.49	0.035	0.394
59-50-7	4-Chloro-3-methylphenol	2.83	0.031	0.394
106-47-8	4-Chloroaniline	1.73	0.039	0.394
7005-72-3	4-Chlorophenyl-phenylether	3.15	0.044	0.394
100-01-6	4-Nitroaniline	2.66	0.074	1.97
100-02-7	4-Nitrophenol	2.61	0.136	1.97
83-32-9	Acenaphthene	3.26	0.022	0.079
208-96-8	Acenaphthylene	3.73	0.013	0.079
98-86-2	Acetophenone	3.09	0.024	0.394
62-53-3	Aniline	2.70	0.021	0.394
120-12-7	Anthracene	3.51	0.014	0.079
1912-24-9	Atrazine (Aatrex)	4.68	0.058	0.788
100-52-7	Benzaldehyde	0.412	J 0.035	0.788

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30 Units: g  
 Level: (low/med) LOW  
 % Moisture: 16.2 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-15-F MSD  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7982  
 Lab Sample ID: 21101140503  
 Date Collected: 01/13/11 Time: 1400  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1729  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4  
 Prep Batch: 448916 Analytical Batch: 448983

CONCENTRATION UNITS: mg/kg

**CAS NO. COMPOUND**

**RESULT**

**MDL**

**RL**

56-55-3	Benzo(a)anthracene	3.32		0.017	0.079
50-32-8	Benzo(a)pyrene	3.44		0.023	0.079
205-99-2	Benzo(b)fluoranthene	2.82		0.012	0.394
191-24-2	Benzo(g,h,i)perylene	2.73		0.011	0.394
207-08-9	Benzo(k)fluoranthene	3.62		0.018	0.394
65-85-0	Benzoic acid	1.87	J	0.136	1.97
100-51-6	Benzyl alcohol	3.12		0.046	0.394
92-52-4	Biphenyl	3.10		0.013	0.394
111-91-1	Bis(2-Chloroethoxy)methane	3.30		0.022	0.394
111-44-4	Bis(2-Chloroethyl)ether	3.22		0.030	0.394
108-60-1	bis(2-Chloroisopropyl)ether	3.16		0.020	0.394
117-81-7	bis(2-ethylhexyl)phthalate	3.40		0.015	0.079
85-68-7	Butylbenzylphthalate	3.59		0.00831	0.394
105-60-2	Caprolactam	3.21		0.042	0.394
86-74-8	Carbazole	2.98		0.028	0.394
218-01-9	Chrysene	3.38		0.013	0.394
84-74-2	Di-n-butylphthalate	3.40		0.00952	0.394
117-84-0	Di-n-octylphthalate	3.30		0.013	0.394
53-70-3	Dibenz(a,h)anthracene	2.85		0.011	0.079
132-64-9	Dibenzofuran	2.98		0.014	0.394
84-66-2	Diethylphthalate	3.32		0.036	0.394
131-11-3	Dimethyl-phthalate	3.31		0.00873	0.394
206-44-0	Fluoranthene	3.28		0.00872	0.394
86-73-7	Fluorene	3.20		0.012	0.079
118-74-1	Hexachlorobenzene	3.03		0.047	0.394
77-47-4	Hexachlorocyclopentadiene	3.40		0.059	0.394
67-72-1	Hexachloroethane	2.84		0.059	0.394
193-39-5	Indeno(1,2,3-cd)pyrene	2.61		0.016	0.394
78-59-1	Isophorone	3.26		0.013	0.394

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30 Units: g  
 Level: (low/med) LOW  
 % Moisture: 16.2 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-15-F MSD  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7982  
 Lab Sample ID: 21101140503  
 Date Collected: 01/13/11 Time: 1400  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1729  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT**

**MDL**

**RL**

98-95-3	Nitrobenzene	3.08		0.018	0.394
87-86-5	Pentachlorophenol	2.39		0.032	1.97
85-01-8	Phenanthrene	3.32		0.016	0.079
108-95-2	Phenol	2.76		0.019	0.394
129-00-0	Pyrene	3.98		0.055	0.394
110-86-1	Pyridine	2.45		0.022	0.394
1319-77-3M	m,p-Cresol	2.77		0.069	0.394
621-64-7	N-Nitroso-di-n-propylamine	3.25		0.020	0.079
62-75-9	N-Nitrosodimethylamine	2.90		0.020	0.394
86-30-6	N-Nitrosodiphenylamine	3.53		0.013	0.394
95-48-7	o-Cresol	2.76		0.012	0.394

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30 Units: g  
 Level: (low/med) LOW  
 % Moisture: 16.7 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-21-F  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7983  
 Lab Sample ID: 21101140504  
 Date Collected: 01/13/11 Time: 1445  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1746  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

122-66-7	1,2-Diphenylhydrazine	0.396	U	0.00901	0.396
95-95-4	2,4,5-Trichlorophenol	0.396	U	0.047	0.396
88-06-2	2,4,6-Trichlorophenol	0.396	U	0.062	0.396
120-83-2	2,4-Dichlorophenol	0.396	U	0.064	0.396
105-67-9	2,4-Dimethylphenol	0.396	U	0.050	0.396
51-28-5	2,4-Dinitrophenol	1.98	U	0.212	1.98
121-14-2	2,4-Dinitrotoluene	0.396	U	0.056	0.396
606-20-2	2,6-Dinitrotoluene	0.396	U	0.023	0.396
91-58-7	2-Chloronaphthalene	0.396	U	0.021	0.396
95-57-8	2-Chlorophenol	0.396	U	0.030	0.396
91-57-6	2-Methylnaphthalene	0.128		0.021	0.079
88-74-4	2-Nitroaniline	1.98	U	0.045	1.98
88-75-5	2-Nitrophenol	0.396	U	0.018	0.396
91-94-1	3,3'-Dichlorobenzidine	0.792	U	0.253	0.792
99-09-2	3-Nitroaniline	1.98	U	0.048	1.98
534-52-1	2-Methyl-4,6-dinitrophenol	1.98	U	0.039	1.98
101-55-3	4-Bromophenyl-phenylether	0.396	U	0.035	0.396
59-50-7	4-Chloro-3-methylphenol	0.396	U	0.031	0.396
106-47-8	4-Chloroaniline	0.396	U	0.039	0.396
7005-72-3	4-Chlorophenyl-phenylether	0.396	U	0.044	0.396
100-01-6	4-Nitroaniline	1.98	U	0.074	1.98
100-02-7	4-Nitrophenol	1.98	U	0.137	1.98
83-32-9	Acenaphthene	0.142		0.022	0.079
208-96-8	Acenaphthylene	0.045	J	0.013	0.079
98-86-2	Acetophenone	0.396	U	0.025	0.396
62-53-3	Aniline	0.396	U	0.021	0.396
120-12-7	Anthracene	0.257		0.014	0.079
1912-24-9	Atrazine (Aatrex)	0.792	U	0.059	0.792
100-52-7	Benzaldehyde	0.792	U	0.036	0.792

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30 Units: g  
 Level: (low/med) LOW  
 % Moisture: 16.7 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-21-F  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7983  
 Lab Sample ID: 21101140504  
 Date Collected: 01/13/11 Time: 1445  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1746  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

92-87-5	Benzidine	1.98	U	1.98	1.98
56-55-3	Benzo(a)anthracene	0.275		0.017	0.079
50-32-8	Benzo(a)pyrene	0.188		0.023	0.079
205-99-2	Benzo(b)fluoranthene	0.295	J	0.012	0.396
191-24-2	Benzo(g,h,i)perylene	0.236	J	0.011	0.396
207-08-9	Benzo(k)fluoranthene	0.079	J	0.018	0.396
65-85-0	Benzoic acid	1.98	U	0.137	1.98
100-51-6	Benzyl alcohol	0.396	U	0.046	0.396
92-52-4	Biphenyl	0.062	J	0.013	0.396
111-91-1	Bis(2-Chloroethoxy)methane	0.396	U	0.022	0.396
111-44-4	Bis(2-Chloroethyl)ether	0.396	U	0.030	0.396
108-60-1	bis(2-Chloroisopropyl)ether	0.396	U	0.020	0.396
117-81-7	bis(2-ethylhexyl)phthalate	0.275		0.015	0.079
85-68-7	Butylbenzylphthalate	0.396	U	0.00835	0.396
86-74-8	Carbazole	0.396	U	0.028	0.396
218-01-9	Chrysene	0.377	J	0.013	0.396
84-74-2	Di-n-butylphthalate	0.396	U	0.00956	0.396
117-84-0	Di-n-octylphthalate	0.396	U	0.013	0.396
53-70-3	Dibenz(a,h)anthracene	0.079	U	0.011	0.079
132-64-9	Dibenzofuran	0.396	U	0.014	0.396
84-66-2	Diethylphthalate	0.396	U	0.037	0.396
131-11-3	Dimethyl-phthalate	0.396	U	0.00877	0.396
206-44-0	Fluoranthene	0.352	J	0.00876	0.396
86-73-7	Fluorene	0.160		0.012	0.079
118-74-1	Hexachlorobenzene	0.396	U	0.047	0.396
77-47-4	Hexachlorocyclopentadiene	0.396	U	0.059	0.396
67-72-1	Hexachloroethane	0.396	U	0.059	0.396
193-39-5	Indeno(1,2,3-cd)pyrene	0.257	J	0.016	0.396
78-59-1	Isophorone	0.396	U	0.013	0.396

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30 Units: g  
 Level: (low/med) LOW  
 % Moisture: 16.7 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-21-F  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7983  
 Lab Sample ID: 21101140504  
 Date Collected: 01/13/11 Time: 1445  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1746  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

98-95-3	Nitrobenzene	0.396	U	0.018	0.396
87-86-5	Pentachlorophenol	1.98	U	0.032	1.98
85-01-8	Phenanthrene	1.18		0.016	0.079
108-95-2	Phenol	0.396	U	0.019	0.396
129-00-0	Pyrene	0.832		0.056	0.396
110-86-1	Pyridine	0.396	U	0.022	0.396
1319-77-3M	m,p-Cresol	0.396	U	0.070	0.396
621-64-7	N-Nitroso-di-n-propylamine	0.079	U	0.020	0.079
62-75-9	N-Nitrosodimethylamine	0.396	U	0.020	0.396
86-30-6	N-Nitrosodiphenylamine	0.396	U	0.013	0.396
95-48-7	o-Cresol	0.396	U	0.012	0.396

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30 Units: g  
 Level: (low/med) LOW  
 % Moisture: 16.7 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

CONCENTRATION UNITS: mg/kg

**CAS NO. COMPOUND**

Sample ID: T-21-F  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110117/e8009  
 Lab Sample ID: 21101140504  
 Date Collected: 01/13/11 Time: 1445  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/17/11 Time: 0856  
 Dilution Factor: 10 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4  
 Prep Batch: 448916 Analytical Batch: 449083

**RESULT MDL RL**

105-60-2	Caprolactam	27.5		0.420	3.96
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1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30.2 Units: g  
 Level: (low/med) LOW  
 % Moisture: 17.1 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: NC-0-0.3  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7984  
 Lab Sample ID: 21101140505  
 Date Collected: 01/13/11 Time: 1455  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1803  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

122-66-7	1,2-Diphenylhydrazine	0.395	U	0.00900	0.395
95-95-4	2,4,5-Trichlorophenol	0.395	U	0.047	0.395
88-06-2	2,4,6-Trichlorophenol	0.395	U	0.062	0.395
120-83-2	2,4-Dichlorophenol	0.395	U	0.064	0.395
105-67-9	2,4-Dimethylphenol	0.395	U	0.050	0.395
51-28-5	2,4-Dinitrophenol	1.98	U	0.212	1.98
121-14-2	2,4-Dinitrotoluene	0.395	U	0.056	0.395
606-20-2	2,6-Dinitrotoluene	0.395	U	0.023	0.395
91-58-7	2-Chloronaphthalene	0.395	U	0.021	0.395
95-57-8	2-Chlorophenol	0.395	U	0.030	0.395
91-57-6	2-Methylnaphthalene	0.145		0.021	0.079
88-74-4	2-Nitroaniline	1.98	U	0.044	1.98
88-75-5	2-Nitrophenol	0.395	U	0.018	0.395
91-94-1	3,3'-Dichlorobenzidine	0.791	U	0.253	0.791
99-09-2	3-Nitroaniline	1.98	U	0.048	1.98
534-52-1	2-Methyl-4,6-dinitrophenol	1.98	U	0.039	1.98
101-55-3	4-Bromophenyl-phenylether	0.395	U	0.035	0.395
59-50-7	4-Chloro-3-methylphenol	0.395	U	0.031	0.395
106-47-8	4-Chloroaniline	0.395	U	0.039	0.395
7005-72-3	4-Chlorophenyl-phenylether	0.395	U	0.044	0.395
100-01-6	4-Nitroaniline	1.98	U	0.074	1.98
100-02-7	4-Nitrophenol	1.98	U	0.137	1.98
83-32-9	Acenaphthene	0.069	J	0.022	0.079
208-96-8	Acenaphthylene	0.058	J	0.013	0.079
98-86-2	Acetophenone	0.068	J	0.025	0.395
62-53-3	Aniline	0.395	U	0.021	0.395
120-12-7	Anthracene	0.113		0.014	0.079
1912-24-9	Atrazine (Aatrex)	0.791	U	0.058	0.791
100-52-7	Benzaldehyde	0.791	U	0.035	0.791

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30.2 Units: g  
 Level: (low/med) LOW  
 % Moisture: 17.1 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: NC-0-0.3  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7984  
 Lab Sample ID: 21101140505  
 Date Collected: 01/13/11 Time: 1455  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1803  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

CAS NO.	COMPOUND	RESULT	MDL	RL
92-87-5	Benzidine	1.98	U	1.98
56-55-3	Benzo(a)anthracene	0.217		0.017
50-32-8	Benzo(a)pyrene	0.162		0.023
205-99-2	Benzo(b)fluoranthene	0.346	J	0.012
191-24-2	Benzo(g,h,i)perylene	0.286	J	0.011
207-08-9	Benzo(k)fluoranthene	0.074	J	0.018
65-85-0	Benzoic acid	1.98	U	0.137
100-51-6	Benzyl alcohol	0.395	U	0.046
92-52-4	Biphenyl	0.058	J	0.013
111-91-1	Bis(2-Chloroethoxy)methane	0.395	U	0.022
111-44-4	Bis(2-Chloroethyl)ether	0.395	U	0.030
108-60-1	bis(2-Chloroisopropyl)ether	0.395	U	0.020
117-81-7	bis(2-ethylhexyl)phthalate	0.501		0.015
85-68-7	Butylbenzylphthalate	0.395	U	0.00834
105-60-2	Caprolactam	0.395	U	0.042
86-74-8	Carbazole	0.395	U	0.028
218-01-9	Chrysene	0.215	J	0.013
84-74-2	Di-n-butylphthalate	0.395	U	0.00955
117-84-0	Di-n-octylphthalate	0.395	U	0.013
53-70-3	Dibenz(a,h)anthracene	0.079	U	0.011
132-64-9	Dibenzofuran	0.395	U	0.014
84-66-2	Diethylphthalate	0.395	U	0.037
131-11-3	Dimethyl-phthalate	0.395	U	0.00876
206-44-0	Fluoranthene	0.420		0.00875
86-73-7	Fluorene	0.115		0.012
118-74-1	Hexachlorobenzene	0.395	U	0.047
77-47-4	Hexachlorocyclopentadiene	0.395	U	0.059
67-72-1	Hexachloroethane	0.395	U	0.059
193-39-5	Indeno(1,2,3-cd)pyrene	0.312	J	0.016

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCALSample ID: NC-0-0.3Lab Code: LA024

Case No.: \_\_\_\_\_

Contract: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405Lab File ID: 2110114/e7984Matrix: SolidLab Sample ID: 21101140505Sample wt/vol: 30.2Units: gDate Collected: 01/13/11Time: 1455Level: (low/med) LOWDate Received: 01/14/11% Moisture: 17.1

decanted: (Y/N) \_\_\_\_\_

Date Extracted: 01/14/11GC Column: RTX-5MS-30ID: .25

(mm)

Date Analyzed: 01/14/11Time: 1803Concentrated Extract Volume: 1000

(µL)

Dilution Factor: 1Analyst: KCBInjection Volume: 1.0

(µL)

Prep Method: 3550BGPC Cleanup: (Y/N) N

pH: \_\_\_\_\_

Analytical Method: SW-846 8270Instrument ID: MSSV4CONCENTRATION UNITS: mg/kgPrep Batch: 448916Analytical Batch: 448983**CAS NO. COMPOUND****RESULT****MDL****RL**

78-59-1	Isophorone	0.395	U	0.013	0.395
98-95-3	Nitrobenzene	0.395	U	0.018	0.395
87-86-5	Pentachlorophenol	1.98	U	0.032	1.98
85-01-8	Phenanthrene	0.493		0.016	0.079
108-95-2	Phenol	0.395	U	0.019	0.395
129-00-0	Pyrene	0.380	J	0.055	0.395
110-86-1	Pyridine	0.395	U	0.022	0.395
1319-77-3M	m,p-Cresol	0.395	U	0.070	0.395
621-64-7	N-Nitroso-di-n-propylamine	0.079	U	0.020	0.079
62-75-9	N-Nitrosodimethylamine	0.395	U	0.020	0.395
86-30-6	N-Nitrosodiphenylamine	0.395	U	0.013	0.395
95-48-7	o-Cresol	0.395	U	0.012	0.395

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30 Units: g  
 Level: (low/med) LOW  
 % Moisture: 20.1 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-2-WEST  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7985  
 Lab Sample ID: 21101140506  
 Date Collected: 01/13/11 Time: 1505  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1819  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT**

**MDL**

**RL**

122-66-7	1,2-Diphenylhydrazine	0.413	U	0.00939	0.413
95-95-4	2,4,5-Trichlorophenol	0.413	U	0.049	0.413
88-06-2	2,4,6-Trichlorophenol	0.413	U	0.065	0.413
120-83-2	2,4-Dichlorophenol	0.413	U	0.066	0.413
105-67-9	2,4-Dimethylphenol	0.413	U	0.053	0.413
51-28-5	2,4-Dinitrophenol	2.06	U	0.221	2.06
121-14-2	2,4-Dinitrotoluene	0.413	U	0.058	0.413
606-20-2	2,6-Dinitrotoluene	0.413	U	0.024	0.413
91-58-7	2-Chloronaphthalene	0.413	U	0.022	0.413
95-57-8	2-Chlorophenol	0.413	U	0.032	0.413
91-57-6	2-Methylnaphthalene	0.083	U	0.022	0.083
88-74-4	2-Nitroaniline	2.06	U	0.046	2.06
88-75-5	2-Nitrophenol	0.413	U	0.019	0.413
91-94-1	3,3'-Dichlorobenzidine	0.826	U	0.264	0.826
99-09-2	3-Nitroaniline	2.06	U	0.050	2.06
534-52-1	2-Methyl-4,6-dinitrophenol	2.06	U	0.041	2.06
101-55-3	4-Bromophenyl-phenylether	0.413	U	0.036	0.413
59-50-7	4-Chloro-3-methylphenol	0.413	U	0.033	0.413
106-47-8	4-Chloroaniline	0.413	U	0.041	0.413
7005-72-3	4-Chlorophenyl-phenylether	0.413	U	0.046	0.413
100-01-6	4-Nitroaniline	2.06	U	0.077	2.06
100-02-7	4-Nitrophenol	2.06	U	0.143	2.06
83-32-9	Acenaphthene	0.083	U	0.023	0.083
208-96-8	Acenaphthylene	0.083	U	0.014	0.083
98-86-2	Acetophenone	0.413	U	0.026	0.413
62-53-3	Aniline	0.413	U	0.022	0.413
120-12-7	Anthracene	0.083	U	0.015	0.083
1912-24-9	Atrazine (Aatrex)	0.826	U	0.061	0.826
100-52-7	Benzaldehyde	0.826	U	0.037	0.826

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: Solid

Sample wt/vol: 30 Units: g

Level: (low/med) LOW

% Moisture: 20.1 decanted: (Y/N) \_\_\_\_\_

GC Column: RTX-5MS-30 ID: .25 (mm)

Concentrated Extract Volume: 1000 (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-2-WEST

Contract: \_\_\_\_\_

Lab File ID: 2110114/e7985

Lab Sample ID: 21101140506

Date Collected: 01/13/11 Time: 1505

Date Received: 01/14/11

Date Extracted: 01/14/11

Date Analyzed: 01/14/11 Time: 1819

Dilution Factor: 1 Analyst: KCB

Prep Method: 3550B

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

CAS NO.	COMPOUND	RESULT	MDL	RL
92-87-5	Benzidine	2.06	U	2.06
56-55-3	Benzo(a)anthracene	0.083	U	0.018
50-32-8	Benzo(a)pyrene	0.083	U	0.024
205-99-2	Benzo(b)fluoranthene	0.413	U	0.013
191-24-2	Benzo(g,h,i)perylene	0.413	U	0.011
207-08-9	Benzo(k)fluoranthene	0.413	U	0.019
65-85-0	Benzoic acid	2.06	U	0.143
100-51-6	Benzyl alcohol	0.413	U	0.048
92-52-4	Biphenyl	0.029	J	0.014
111-91-1	Bis(2-Chloroethoxy)methane	0.413	U	0.023
111-44-4	Bis(2-Chloroethyl)ether	0.413	U	0.031
108-60-1	bis(2-Chloroisopropyl)ether	0.413	U	0.021
117-81-7	bis(2-ethylhexyl)phthalate	0.112		0.016
85-68-7	Butylbenzylphthalate	0.413	U	0.00871
105-60-2	Caprolactam	0.413	U	0.044
86-74-8	Carbazole	0.413	U	0.030
218-01-9	Chrysene	0.413	U	0.014
84-74-2	Di-n-butylphthalate	0.015	J	0.00997
117-84-0	Di-n-octylphthalate	0.413	U	0.014
53-70-3	Dibenz(a,h)anthracene	0.083	U	0.011
132-64-9	Dibenzofuran	0.413	U	0.014
84-66-2	Diethylphthalate	0.413	U	0.038
131-11-3	Dimethyl-phthalate	0.413	U	0.00914
206-44-0	Fluoranthene	0.413	U	0.00913
86-73-7	Fluorene	0.020	J	0.013
118-74-1	Hexachlorobenzene	0.413	U	0.049
77-47-4	Hexachlorocyclopentadiene	0.413	U	0.062
67-72-1	Hexachloroethane	0.413	U	0.061
193-39-5	Indeno(1,2,3-cd)pyrene	0.413	U	0.017

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30 Units: g  
 Level: (low/med) LOW  
 % Moisture: 20.1 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-2-WEST  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7985  
 Lab Sample ID: 21101140506  
 Date Collected: 01/13/11 Time: 1505  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1819  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4  
 Prep Batch: 448916 Analytical Batch: 448983

CONCENTRATION UNITS: mg/kg

**CAS NO. COMPOUND**

**RESULT**

**MDL**

**RL**

78-59-1	Isophorone	0.413	U	0.014	0.413
98-95-3	Nitrobenzene	0.413	U	0.019	0.413
87-86-5	Pentachlorophenol	2.06	U	0.034	2.06
85-01-8	Phenanthrene	0.024	J	0.017	0.083
108-95-2	Phenol	0.413	U	0.020	0.413
129-00-0	Pyrene	0.413	U	0.058	0.413
110-86-1	Pyridine	0.413	U	0.023	0.413
1319-77-3M	m,p-Cresol	0.413	U	0.073	0.413
621-64-7	N-Nitroso-di-n-propylamine	0.083	U	0.021	0.083
62-75-9	N-Nitrosodimethylamine	0.413	U	0.021	0.413
86-30-6	N-Nitrosodiphenylamine	0.413	U	0.013	0.413
95-48-7	o-Cresol	0.413	U	0.013	0.413

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30.1 Units: g  
 Level: (low/med) LOW  
 % Moisture: 26.0 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-6-FLOOR  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7986  
 Lab Sample ID: 21101140507  
 Date Collected: 01/13/11 Time: 1535  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1836  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

CAS NO.	COMPOUND	RESULT	MDL	RL
122-66-7	1,2 Diphenylhydrazine	0.445	U	0.010
95-95-4	2,4,5-Trichlorophenol	0.445	U	0.053
88-06-2	2,4,6-Trichlorophenol	0.445	U	0.070
120-83-2	2,4-Dichlorophenol	0.445	U	0.072
105-67-9	2,4-Dimethylphenol	0.445	U	0.057
51-28-5	2,4-Dinitrophenol	2.22	U	0.238
121-14-2	2,4-Dinitrotoluene	0.445	U	0.063
606-20-2	2,6-Dinitrotoluene	0.445	U	0.026
91-58-7	2-Chloronaphthalene	0.445	U	0.024
95-57-8	2-Chlorophenol	0.445	U	0.034
91-57-6	2-Methylnaphthalene	0.089	U	0.024
88-74-4	2-Nitroaniline	2.22	U	0.050
88-75-5	2-Nitrophenol	0.445	U	0.020
91-94-1	3,3'-Dichlorobenzidine	0.889	U	0.284
99-09-2	3-Nitroaniline	2.22	U	0.054
534-52-1	2-Methyl-4,6-dinitrophenol	2.22	U	0.044
101-55-3	4-Bromophenyl-phenylether	0.445	U	0.039
59-50-7	4-Chloro-3-methylphenol	0.445	U	0.035
106-47-8	4-Chloroaniline	0.445	U	0.044
7005-72-3	4-Chlorophenyl-phenylether	0.445	U	0.049
100-01-6	4-Nitroaniline	2.22	U	0.083
100-02-7	4-Nitrophenol	2.22	U	0.154
83-32-9	Acenaphthene	0.089	U	0.025
208-96-8	Acenaphthylene	0.089	U	0.015
98-86-2	Acetophenone	0.046	J	0.028
62-53-3	Aniline	0.445	U	0.024
120-12-7	Anthracene	0.089	U	0.016
1912-24-9	Atrazine (Aatrex)	0.889	U	0.066
100-52-7	Benzaldehyde	0.889	U	0.040

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30.1 Units: g  
 Level: (low/med) LOW  
 % Moisture: 26.0 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-6-FLOOR  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7986  
 Lab Sample ID: 21101140507  
 Date Collected: 01/13/11 Time: 1535  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1836  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4  
 Prep Batch: 448916 Analytical Batch: 448983

CONCENTRATION UNITS: mg/kg

**CAS NO. COMPOUND**

**RESULT MDL RL**

92-87-5	Benzidine	2.22	U	2.22	2.22
56-55-3	Benzo(a)anthracene	0.089	U	0.019	0.089
50-32-8	Benzo(a)pyrene	0.089	U	0.026	0.089
205-99-2	Benzo(b)fluoranthene	0.445	U	0.014	0.445
191-24-2	Benzo(g,h,i)perylene	0.445	U	0.012	0.445
207-08-9	Benzo(k)fluoranthene	0.445	U	0.020	0.445
65-85-0	Benzoic acid	2.22	U	0.154	2.22
100-51-6	Benzyl alcohol	0.445	U	0.052	0.445
92-52-4	Biphenyl	0.445	U	0.015	0.445
111-91-1	Bis(2-Chloroethoxy)methane	0.445	U	0.025	0.445
111-44-4	Bis(2-Chloroethyl)ether	0.445	U	0.034	0.445
108-60-1	bis(2-Chloroisopropyl)ether	0.445	U	0.023	0.445
117-81-7	bis(2-ethylhexyl)phthalate	0.089	U	0.017	0.089
85-68-7	Butylbenzylphthalate	0.445	U	0.00938	0.445
105-60-2	Caprolactam	0.445	U	0.047	0.445
86-74-8	Carbazole	0.445	U	0.032	0.445
218-01-9	Chrysene	0.445	U	0.015	0.445
84-74-2	Di-n-butylphthalate	0.013	J	0.011	0.445
117-84-0	Di-n-octylphthalate	0.445	U	0.015	0.445
53-70-3	Dibenz(a,h)anthracene	0.089	U	0.012	0.089
132-64-9	Dibenzofuran	0.445	U	0.015	0.445
84-66-2	Diethylphthalate	0.445	U	0.041	0.445
131-11-3	Dimethyl-phthalate	0.445	U	0.00985	0.445
206-44-0	Fluoranthene	0.445	U	0.00984	0.445
86-73-7	Fluorene	0.089	U	0.014	0.089
118-74-1	Hexachlorobenzene	0.445	U	0.053	0.445
77-47-4	Hexachlorocyclopentadiene	0.445	U	0.066	0.445
67-72-1	Hexachloroethane	0.445	U	0.066	0.445
193-39-5	Indeno(1,2,3-cd)pyrene	0.445	U	0.018	0.445

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30.1 Units: g  
 Level: (low/med) LOW  
 % Moisture: 26.0 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-6-FLOOR  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7986  
 Lab Sample ID: 21101140507  
 Date Collected: 01/13/11 Time: 1535  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1836  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT**

**MDL**

**RL**

78-59-1	Isophorone	0.445	U	0.015	0.445
98-95-3	Nitrobenzene	0.445	U	0.021	0.445
87-86-5	Pentachlorophenol	2.22	U	0.036	2.22
85-01-8	Phenanthrene	0.089	U	0.018	0.089
108-95-2	Phenol	0.445	U	0.022	0.445
129-00-0	Pyrene	0.445	U	0.062	0.445
110-86-1	Pyridine	0.445	U	0.025	0.445
1319-77-3M	m,p-Cresol	0.445	U	0.078	0.445
621-64-7	N-Nitroso-di-n-propylamine	0.089	U	0.023	0.089
62-75-9	N-Nitrosodimethylamine	0.445	U	0.023	0.445
86-30-6	N-Nitrosodiphenylamine	0.445	U	0.014	0.445
95-48-7	o-Cresol	0.445	U	0.014	0.445

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: Solid

Sample wt/vol: 30 Units: g

Level: (low/med) LOW

% Moisture: 26.5 decanted: (Y/N) \_\_\_\_\_

GC Column: RTX-5MS-30 ID: .25 (mm)

Concentrated Extract Volume: 1000 (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-6-EAST

Contract: \_\_\_\_\_

Lab File ID: 2110114/e7987

Lab Sample ID: 21101140508

Date Collected: 01/13/11 Time: 1555

Date Received: 01/14/11

Date Extracted: 01/14/11

Date Analyzed: 01/14/11 Time: 1853

Dilution Factor: 1 Analyst: KCB

Prep Method: 3550B

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

122-66-7	1,2 Diphenylhydrazine	0.449	U	0.010	0.449
95-95-4	2,4,5-Trichlorophenol	0.449	U	0.054	0.449
88-06-2	2,4,6-Trichlorophenol	0.449	U	0.070	0.449
120-83-2	2,4-Dichlorophenol	0.449	U	0.072	0.449
105-67-9	2,4-Dimethylphenol	0.449	U	0.057	0.449
51-28-5	2,4-Dinitrophenol	2.24	U	0.241	2.24
121-14-2	2,4-Dinitrotoluene	0.449	U	0.063	0.449
606-20-2	2,6-Dinitrotoluene	0.449	U	0.027	0.449
91-58-7	2-Chloronaphthalene	0.449	U	0.024	0.449
95-57-8	2-Chlorophenol	0.449	U	0.035	0.449
91-57-6	2-Methylnaphthalene	1.29		0.024	0.090
88-74-4	2-Nitroaniline	2.24	U	0.050	2.24
88-75-5	2-Nitrophenol	0.449	U	0.021	0.449
91-94-1	3,3'-Dichlorobenzidine	0.898	U	0.287	0.898
99-09-2	3-Nitroaniline	2.24	U	0.055	2.24
534-52-1	2-Methyl-4,6-dinitrophenol	2.24	U	0.044	2.24
101-55-3	4-Bromophenyl-phenylether	0.449	U	0.040	0.449
59-50-7	4-Chloro-3-methylphenol	0.449	U	0.035	0.449
106-47-8	4-Chloroaniline	0.449	U	0.045	0.449
7005-72-3	4-Chlorophenyl-phenylether	0.449	U	0.050	0.449
100-01-6	4-Nitroaniline	2.24	U	0.084	2.24
100-02-7	4-Nitrophenol	2.24	U	0.155	2.24
83-32-9	Acenaphthene	0.233		0.025	0.090
208-96-8	Acenaphthylene	0.574		0.015	0.090
98-86-2	Acetophenone	0.951		0.028	0.449
62-53-3	Aniline	0.449	U	0.024	0.449
120-12-7	Anthracene	0.072	J	0.016	0.090
1912-24-9	Atrazine (Aatrex)	0.898	U	0.066	0.898
100-52-7	Benzaldehyde	0.898	U	0.040	0.898

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30 Units: g  
 Level: (low/med) LOW  
 % Moisture: 26.5 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-6-EAST  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7987  
 Lab Sample ID: 21101140508  
 Date Collected: 01/13/11 Time: 1555  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1853  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

CAS NO.	COMPOUND	RESULT	MDL	RL
92-87-5	Benzidine	2.24	U	2.24
56-55-3	Benzo(a)anthracene	0.090	U	0.019
50-32-8	Benzo(a)pyrene	0.090	U	0.026
205-99-2	Benzo(b)fluoranthene	0.449	U	0.014
191-24-2	Benzo(g,h,i)perylene	0.449	U	0.012
207-08-9	Benzo(k)fluoranthene	0.449	U	0.021
65-85-0	Benzoic acid	2.24	U	0.155
100-51-6	Benzyl alcohol	0.449	U	0.052
92-52-4	Biphenyl	0.435	J	0.015
111-91-1	Bis(2-Chloroethoxy)methane	0.449	U	0.025
111-44-4	Bis(2-Chloroethyl)ether	0.449	U	0.034
108-60-1	bis(2-Chloroisopropyl)ether	0.449	U	0.023
117-81-7	bis(2-ethylhexyl)phthalate	0.090	U	0.017
85-68-7	Butylbenzylphthalate	0.449	U	0.00947
105-60-2	Caprolactam	0.449	U	0.048
86-74-8	Carbazole	0.449	U	0.032
218-01-9	Chrysene	0.449	U	0.015
84-74-2	Di-n-butylphthalate	0.449	U	0.011
117-84-0	Di-n-octylphthalate	0.449	U	0.015
53-70-3	Dibenz(a,h)anthracene	0.090	U	0.012
132-64-9	Dibenzofuran	0.449	U	0.016
84-66-2	Diethylphthalate	0.449	U	0.041
131-11-3	Dimethyl-phthalate	0.449	U	0.00994
206-44-0	Fluoranthene	0.040	J	0.00993
86-73-7	Fluorene	0.268		0.014
118-74-1	Hexachlorobenzene	0.449	U	0.054
77-47-4	Hexachlorocyclopentadiene	0.449	U	0.067
67-72-1	Hexachloroethane	0.449	U	0.067
193-39-5	Indeno(1,2,3-cd)pyrene	0.449	U	0.018

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30 Units: g  
 Level: (low/med) LOW  
 % Moisture: 26.5 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-6-EAST  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7987  
 Lab Sample ID: 21101140508  
 Date Collected: 01/13/11 Time: 1555  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1853  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT**

**MDL**

**RL**

78-59-1	Isophorone	0.449	U	0.015	0.449
98-95-3	Nitrobenzene	0.449	U	0.021	0.449
87-86-5	Pentachlorophenol	2.24	U	0.037	2.24
85-01-8	Phenanthrene	0.290		0.018	0.090
108-95-2	Phenol	0.449	U	0.022	0.449
129-00-0	Pyrene	0.063	J	0.063	0.449
110-86-1	Pyridine	0.449	U	0.025	0.449
1319-77-3M	m,p-Cresol	0.174	J	0.079	0.449
621-64-7	N-Nitroso-di-n-propylamine	0.090	U	0.023	0.090
62-75-9	N-Nitrosodimethylamine	0.449	U	0.023	0.449
86-30-6	N-Nitrosodiphenylamine	0.449	U	0.014	0.449
95-48-7	o-Cresol	0.156	J	0.014	0.449

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: Solid

Sample wt/vol: 30.4 Units: g

Level: (low/med) LOW

% Moisture: 26.1 decanted: (Y/N) \_\_\_\_\_

GC Column: RTX-5MS-30 ID: .25 (mm)

Concentrated Extract Volume: 1000 (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-6-SOUTH

Contract: \_\_\_\_\_

Lab File ID: 2110114/e7988

Lab Sample ID: 21101140509

Date Collected: 01/13/11 Time: 1615

Date Received: 01/14/11

Date Extracted: 01/14/11

Date Analyzed: 01/14/11 Time: 1909

Dilution Factor: 1 Analyst: KCB

Prep Method: 3550B

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

122-66-7	1,2-Diphenylhydrazine	0.441	U	0.010	0.441
95-95-4	2,4,5-Trichlorophenol	0.441	U	0.053	0.441
88-06-2	2,4,6-Trichlorophenol	0.441	U	0.069	0.441
120-83-2	2,4-Dichlorophenol	0.441	U	0.071	0.441
105-67-9	2,4-Dimethylphenol	0.441	U	0.056	0.441
51-28-5	2,4-Dinitrophenol	2.20	U	0.236	2.20
121-14-2	2,4-Dinitrotoluene	0.441	U	0.062	0.441
606-20-2	2,6-Dinitrotoluene	0.441	U	0.026	0.441
91-58-7	2-Chloronaphthalene	0.441	U	0.024	0.441
95-57-8	2-Chlorophenol	0.441	U	0.034	0.441
91-57-6	2-Methylnaphthalene	0.550		0.024	0.088
88-74-4	2-Nitroaniline	2.20	U	0.050	2.20
88-75-5	2-Nitrophenol	0.441	U	0.020	0.441
91-94-1	3,3'-Dichlorobenzidine	0.882	U	0.282	0.882
99-09-2	3-Nitroaniline	2.20	U	0.054	2.20
534-52-1	2-Methyl-4,6-dinitrophenol	2.20	U	0.043	2.20
101-55-3	4-Bromophenyl-phenylether	0.441	U	0.039	0.441
59-50-7	4-Chloro-3-methylphenol	0.441	U	0.035	0.441
106-47-8	4-Chloroaniline	0.441	U	0.044	0.441
7005-72-3	4-Chlorophenyl-phenylether	0.441	U	0.049	0.441
100-01-6	4-Nitroaniline	2.20	U	0.082	2.20
100-02-7	4-Nitrophenol	2.20	U	0.152	2.20
83-32-9	Acenaphthene	0.084	J	0.025	0.088
208-96-8	Acenaphthylene	0.037	J	0.015	0.088
98-86-2	Acetophenone	0.487		0.027	0.441
62-53-3	Aniline	0.441	U	0.024	0.441
120-12-7	Anthracene	0.088	U	0.015	0.088
1912-24-9	Atrazine (Aatrex)	0.882	U	0.065	0.882
100-52-7	Benzaldehyde	0.882	U	0.040	0.882

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30.4 Units: g  
 Level: (low/med) LOW  
 % Moisture: 26.1 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-6-SOUTH  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7988  
 Lab Sample ID: 21101140509  
 Date Collected: 01/13/11 Time: 1615  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1909  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

CAS NO.	COMPOUND	RESULT	MDL	RL
92-87-5	Benzidine	2.20	U	2.20
56-55-3	Benzo(a)anthracene	0.088	U	0.088
50-32-8	Benzo(a)pyrene	0.088	U	0.088
205-99-2	Benzo(b)fluoranthene	0.441	U	0.441
191-24-2	Benzo(g,h,i)perylene	0.441	U	0.441
207-08-9	Benzo(k)fluoranthene	0.441	U	0.441
65-85-0	Benzoic acid	2.20	U	2.20
100-51-6	Benzyl alcohol	0.441	U	0.441
92-52-4	Biphenyl	0.180	J	0.441
111-91-1	Bis(2-Chloroethoxy)methane	0.441	U	0.441
111-44-4	Bis(2-Chloroethyl)ether	0.441	U	0.441
108-60-1	bis(2-Chloroisopropyl)ether	0.441	U	0.441
117-81-7	bis(2-ethylhexyl)phthalate	0.088	U	0.088
85-68-7	Butylbenzylphthalate	0.441	U	0.00930
105-60-2	Caprolactam	0.441	U	0.047
86-74-8	Carbazole	0.441	U	0.032
218-01-9	Chrysene	0.441	U	0.015
84-74-2	Di-n-butylphthalate	0.017	J	0.011
117-84-0	Di-n-octylphthalate	0.441	U	0.014
53-70-3	Dibenz(a,h)anthracene	0.088	U	0.012
132-64-9	Dibenzofuran	0.441	U	0.015
84-66-2	Diethylphthalate	0.441	U	0.041
131-11-3	Dimethyl-phthalate	0.441	U	0.00976
206-44-0	Fluoranthene	0.048	J	0.00975
86-73-7	Fluorene	0.106		0.013
118-74-1	Hexachlorobenzene	0.441	U	0.053
77-47-4	Hexachlorocyclopentadiene	0.441	U	0.066
67-72-1	Hexachloroethane	0.441	U	0.065
193-39-5	Indeno(1,2,3-cd)pyrene	0.441	U	0.018

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: T-6-SOUTH

Lab Code: LA024 Case No.: \_\_\_\_\_

Contract: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Lab File ID: 2110114/e7988

Matrix: Solid

Lab Sample ID: 21101140509

Sample wt/vol: 30.4 Units: g

Date Collected: 01/13/11 Time: 1615

Level: (low/med) LOW

Date Received: 01/14/11

% Moisture: 26.1 decanted: (Y/N) \_\_\_\_\_

Date Extracted: 01/14/11

GC Column: RTX-5MS-30 ID: .25 (mm)

Date Analyzed: 01/14/11 Time: 1909

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: KCB

Injection Volume: 1.0 (µL)

Prep Method: 3550B

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

78-59-1	Isophorone	0.441	U	0.014	0.441
98-95-3	Nitrobenzene	0.441	U	0.020	0.441
87-86-5	Pentachlorophenol	2.20	U	0.036	2.20
85-01-8	Phenanthrene	0.129		0.018	0.088
108-95-2	Phenol	0.441	U	0.021	0.441
129-00-0	Pyrene	0.441	U	0.062	0.441
110-86-1	Pyridine	0.441	U	0.025	0.441
1319-77-3M	m,p-Cresol	0.118	J	0.078	0.441
621-64-7	N-Nitroso-di-n-propylamine	0.088	U	0.022	0.088
62-75-9	N-Nitrosodimethylamine	0.441	U	0.023	0.441
86-30-6	N-Nitrosodiphenylamine	0.441	U	0.014	0.441
95-48-7	o-Cresol	0.097	J	0.013	0.441

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: Solid

Sample wt/vol: 30.2 Units: g

Level: (low/med) LOW

% Moisture: 22.5 decanted: (Y/N) \_\_\_\_\_

GC Column: RTX-5MS-30 ID: .25 (mm)

Concentrated Extract Volume: 1000 (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-6-NORTH

Contract: \_\_\_\_\_

Lab File ID: 2110114/e7989

Lab Sample ID: 21101140510

Date Collected: 01/13/11 Time: 1625

Date Received: 01/14/11

Date Extracted: 01/14/11

Date Analyzed: 01/14/11 Time: 1926

Dilution Factor: 1 Analyst: KCB

Prep Method: 3550B

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

122-66-7	1,2-Diphenylhydrazine	0.423	U	0.00962	0.423
95-95-4	2,4,5-Trichlorophenol	0.423	U	0.050	0.423
88-06-2	2,4,6-Trichlorophenol	0.423	U	0.066	0.423
120-83-2	2,4-Dichlorophenol	0.423	U	0.068	0.423
105-67-9	2,4-Dimethylphenol	0.423	U	0.054	0.423
51-28-5	2,4-Dinitrophenol	2.11	U	0.227	2.11
121-14-2	2,4-Dinitrotoluene	0.423	U	0.060	0.423
606-20-2	2,6-Dinitrotoluene	0.423	U	0.025	0.423
91-58-7	2-Chloronaphthalene	0.423	U	0.023	0.423
95-57-8	2-Chlorophenol	0.423	U	0.033	0.423
91-57-6	2-Methylnaphthalene	0.085	U	0.023	0.085
88-74-4	2-Nitroaniline	2.11	U	0.048	2.11
88-75-5	2-Nitrophenol	0.423	U	0.019	0.423
91-94-1	3,3'-Dichlorobenzidine	0.846	U	0.270	0.846
99-09-2	3-Nitroaniline	2.11	U	0.052	2.11
534-52-1	2-Methyl-4,6-dinitrophenol	2.11	U	0.042	2.11
101-55-3	4-Bromophenyl-phenylether	0.423	U	0.037	0.423
59-50-7	4-Chloro-3-methylphenol	0.423	U	0.033	0.423
106-47-8	4-Chloroaniline	0.423	U	0.042	0.423
7005-72-3	4-Chlorophenyl-phenylether	0.423	U	0.047	0.423
100-01-6	4-Nitroaniline	2.11	U	0.079	2.11
100-02-7	4-Nitrophenol	2.11	U	0.146	2.11
83-32-9	Acenaphthene	0.085	U	0.024	0.085
208-96-8	Acenaphthylene	0.040	J	0.014	0.085
98-86-2	Acetophenone	0.423	U	0.026	0.423
62-53-3	Aniline	0.423	U	0.023	0.423
120-12-7	Anthracene	0.085	U	0.015	0.085
1912-24-9	Atrazine (Aatrex)	0.846	U	0.063	0.846
100-52-7	Benzaldehyde	0.846	U	0.038	0.846

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30.2 Units: g  
 Level: (low/med) LOW  
 % Moisture: 22.5 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-6-NORTH  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7989  
 Lab Sample ID: 21101140510  
 Date Collected: 01/13/11 Time: 1625  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1926  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4  
 Prep Batch: 448916 Analytical Batch: 448983

CONCENTRATION UNITS: mg/kg

CAS NO.	COMPOUND	RESULT	MDL	RL
92-87-5	Benidine	2.11	U	2.11
56-55-3	Benzo(a)anthracene	0.085	U	0.085
50-32-8	Benzo(a)pyrene	0.085	U	0.085
205-99-2	Benzo(b)fluoranthene	0.423	U	0.423
191-24-2	Benzo(g,h,i)perylene	0.181	J	0.423
207-08-9	Benzo(k)fluoranthene	0.423	U	0.423
65-85-0	Benzoic acid	2.11	U	2.11
100-51-6	Benzyl alcohol	0.423	U	0.423
92-52-4	Biphenyl	0.423	U	0.423
111-91-1	Bis(2-Chloroethoxy)methane	0.423	U	0.423
111-44-4	Bis(2-Chloroethyl)ether	0.423	U	0.423
108-60-1	bis(2-Chloroisopropyl)ether	0.423	U	0.423
117-81-7	bis(2-ethylhexyl)phthalate	0.115		0.085
85-68-7	Butylbenzylphthalate	0.423	U	0.00892
105-60-2	Caprolactam	0.423	U	0.045
86-74-8	Carbazole	0.423	U	0.030
218-01-9	Chrysene	0.023	J	0.014
84-74-2	Di-n-butylphthalate	0.423	U	0.010
117-84-0	Di-n-octylphthalate	0.423	U	0.014
53-70-3	Dibenz(a,h)anthracene	0.085	U	0.012
132-64-9	Dibenzofuran	0.423	U	0.015
84-66-2	Diethylphthalate	0.044	J	0.039
131-11-3	Dimethyl-phthalate	0.423	U	0.00937
206-44-0	Fluoranthene	0.015	J	0.00935
86-73-7	Fluorene	0.085	U	0.013
118-74-1	Hexachlorobenzene	0.423	U	0.051
77-47-4	Hexachlorocyclopentadiene	0.423	U	0.063
67-72-1	Hexachloroethane	0.423	U	0.063
193-39-5	Indeno(1,2,3-cd)pyrene	0.423	U	0.017

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30.2 Units: g  
 Level: (low/med) LOW  
 % Moisture: 22.5 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: T-6-NORTH  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7989  
 Lab Sample ID: 21101140510  
 Date Collected: 01/13/11 Time: 1625  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1926  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4  
 Prep Batch: 448916 Analytical Batch: 448983

CONCENTRATION UNITS: mg/kg

CAS NO.	COMPOUND	RESULT		MDL	RL
78-59-1	Isophorone	0.423	U	0.014	0.423
98-95-3	Nitrobenzene	0.423	U	0.020	0.423
87-86-5	Pentachlorophenol	2.11	U	0.035	2.11
85-01-8	Phenanthrene	0.019	J	0.017	0.085
108-95-2	Phenol	0.092	J	0.020	0.423
129-00-0	Pyrene	0.423	U	0.059	0.423
110-86-1	Pyridine	0.423	U	0.024	0.423
1319-77-3M	m,p-Cresol	0.423	U	0.074	0.423
621-64-7	N-Nitroso-di-n-propylamine	0.085	U	0.021	0.085
62-75-9	N-Nitrosodimethylamine	0.423	U	0.022	0.423
86-30-6	N-Nitrosodiphenylamine	0.423	U	0.013	0.423
95-48-7	o-Cresol	0.423	U	0.013	0.423

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: Solid

Sample wt/vol: 30.1 Units: g

Level: (low/med) LOW

% Moisture: 24.1 decanted: (Y/N) \_\_\_\_\_

GC Column: RTX-5MS-30 ID: .25 (mm)

Concentrated Extract Volume: 1000 (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: BLIND DUP

Contract: \_\_\_\_\_

Lab File ID: 2110114/e7990

Lab Sample ID: 21101140511

Date Collected: 01/13/11 Time: 0000

Date Received: 01/14/11

Date Extracted: 01/14/11

Date Analyzed: 01/14/11 Time: 1943

Dilution Factor: 1 Analyst: KCB

Prep Method: 3550B

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT**

**MDL**

**RL**

122-66-7	1,2-Diphenylhydrazine	0.434	U	0.00987	0.434
95-95-4	2,4,5-Trichlorophenol	0.434	U	0.052	0.434
88-06-2	2,4,6-Trichlorophenol	0.434	U	0.068	0.434
120-83-2	2,4-Dichlorophenol	0.434	U	0.070	0.434
105-67-9	2,4-Dimethylphenol	0.434	U	0.055	0.434
51-28-5	2,4-Dinitrophenol	2.17	U	0.233	2.17
121-14-2	2,4-Dinitrotoluene	0.434	U	0.061	0.434
606-20-2	2,6-Dinitrotoluene	0.434	U	0.026	0.434
91-58-7	2-Chloronaphthalene	0.434	U	0.024	0.434
95-57-8	2-Chlorophenol	0.434	U	0.033	0.434
91-57-6	2-Methylnaphthalene	0.591		0.023	0.087
88-74-4	2-Nitroaniline	2.17	U	0.049	2.17
88-75-5	2-Nitrophenol	0.434	U	0.020	0.434
91-94-1	3,3'-Dichlorobenzidine	0.867	U	0.277	0.867
99-09-2	3-Nitroaniline	2.17	U	0.053	2.17
534-52-1	2-Methyl-4,6-dinitrophenol	2.17	U	0.043	2.17
101-55-3	4-Bromophenyl-phenylether	0.434	U	0.038	0.434
59-50-7	4-Chloro-3-methylphenol	0.434	U	0.034	0.434
106-47-8	4-Chloroaniline	0.434	U	0.043	0.434
7005-72-3	4-Chlorophenyl-phenylether	0.434	U	0.048	0.434
100-01-6	4-Nitroaniline	2.17	U	0.081	2.17
100-02-7	4-Nitrophenol	2.17	U	0.150	2.17
83-32-9	Acenaphthene	0.097		0.025	0.087
208-96-8	Acenaphthylene	0.285		0.015	0.087
98-86-2	Acetophenone	0.819		0.027	0.434
62-53-3	Aniline	0.434	U	0.023	0.434
120-12-7	Anthracene	0.038	J	0.015	0.087
1912-24-9	Atrazine (Aatrex)	0.867	U	0.064	0.867
100-52-7	Benzaldehyde	0.867	U	0.039	0.867

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30.1 Units: g  
 Level: (low/med) LOW  
 % Moisture: 24.1 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: BLIND DUP  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7990  
 Lab Sample ID: 21101140511  
 Date Collected: 01/13/11 Time: 0000  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1943  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4  
 Prep Batch: 448916 Analytical Batch: 448983

CONCENTRATION UNITS: mg/kg

**CAS NO. COMPOUND**

**RESULT**

**MDL**

**RL**

92-87-5	Benzidine	2.17	U	2.17	2.17
56-55-3	Benzo(a)anthracene	0.087	U	0.019	0.087
50-32-8	Benzo(a)pyrene	0.087	U	0.025	0.087
205-99-2	Benzo(b)fluoranthene	0.434	U	0.014	0.434
191-24-2	Benzo(g,h,i)perylene	0.434	U	0.012	0.434
207-08-9	Benzo(k)fluoranthene	0.434	U	0.020	0.434
65-85-0	Benzoic acid	2.17	U	0.150	2.17
100-51-6	Benzyl alcohol	0.434	U	0.050	0.434
92-52-4	Biphenyl	0.202	J	0.014	0.434
111-91-1	Bis(2-Chloroethoxy)methane	0.434	U	0.024	0.434
111-44-4	Bis(2-Chloroethyl)ether	0.434	U	0.033	0.434
108-60-1	bis(2-Chloroisopropyl)ether	0.434	U	0.022	0.434
117-81-7	bis(2-ethylhexyl)phthalate	0.087	U	0.017	0.087
85-68-7	Butylbenzylphthalate	0.434	U	0.00914	0.434
105-60-2	Caprolactam	0.434	U	0.046	0.434
86-74-8	Carbazole	0.434	U	0.031	0.434
218-01-9	Chrysene	0.434	U	0.015	0.434
84-74-2	Di-n-butylphthalate	0.434	U	0.010	0.434
117-84-0	Di-n-octylphthalate	0.434	U	0.014	0.434
53-70-3	Dibenz(a,h)anthracene	0.087	U	0.012	0.087
132-64-9	Dibenzofuran	0.434	U	0.015	0.434
84-66-2	Diethylphthalate	0.040	J	0.040	0.434
131-11-3	Dimethyl-phthalate	0.434	U	0.00960	0.434
206-44-0	Fluoranthene	0.030	J	0.00959	0.434
86-73-7	Fluorene	0.138		0.013	0.087
118-74-1	Hexachlorobenzene	0.434	U	0.052	0.434
77-47-4	Hexachlorocyclopentadiene	0.434	U	0.065	0.434
67-72-1	Hexachloroethane	0.434	U	0.064	0.434
193-39-5	Indeno(1,2,3-cd)pyrene	0.434	U	0.017	0.434

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30.1 Units: g  
 Level: (low/med) LOW  
 % Moisture: 24.1 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: BLIND DUP  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7990  
 Lab Sample ID: 21101140511  
 Date Collected: 01/13/11 Time: 0000  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1943  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT**

**MDL**

**RL**

78-59-1	Isophorone	0.434	U	0.014	0.434
98-95-3	Nitrobenzene	0.434	U	0.020	0.434
87-86-5	Pentachlorophenol	2.17	U	0.035	2.17
85-01-8	Phenanthrene	0.158		0.018	0.087
108-95-2	Phenol	0.434	U	0.021	0.434
129-00-0	Pyrene	0.434	U	0.061	0.434
110-86-1	Pyridine	0.434	U	0.024	0.434
1319-77-3M	m,p-Cresol	0.179	J	0.076	0.434
621-64-7	N-Nitroso-di-n-propylamine	0.087	U	0.022	0.087
62-75-9	N-Nitrosodimethylamine	0.434	U	0.022	0.434
86-30-6	N-Nitrosodiphenylamine	0.434	U	0.014	0.434
95-48-7	o-Cresol	0.161	J	0.013	0.434

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30 Units: g  
 Level: (low/med) LOW  
 % Moisture: 23.5 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: SC-W  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7991  
 Lab Sample ID: 21101140512  
 Date Collected: 01/13/11 Time: 1645  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 2000  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

122-66-7	1,2-Diphenylhydrazine	0.431	U	0.00981	0.431
95-95-4	2,4,5-Trichlorophenol	0.431	U	0.051	0.431
88-06-2	2,4,6-Trichlorophenol	0.431	U	0.068	0.431
120-83-2	2,4-Dichlorophenol	0.431	U	0.069	0.431
105-67-9	2,4-Dimethylphenol	0.431	U	0.055	0.431
51-28-5	2,4-Dinitrophenol	2.16	U	0.231	2.16
121-14-2	2,4-Dinitrotoluene	0.431	U	0.061	0.431
606-20-2	2,6-Dinitrotoluene	0.431	U	0.025	0.431
91-58-7	2-Chloronaphthalene	0.431	U	0.023	0.431
95-57-8	2-Chlorophenol	0.431	U	0.033	0.431
91-57-6	2-Methylnaphthalene	0.086	U	0.023	0.086
88-74-4	2-Nitroaniline	2.16	U	0.048	2.16
88-75-5	2-Nitrophenol	0.431	U	0.020	0.431
91-94-1	3,3'-Dichlorobenzidine	0.862	U	0.276	0.862
99-09-2	3-Nitroaniline	2.16	U	0.053	2.16
534-52-1	2-Methyl-4,6-dinitrophenol	2.16	U	0.042	2.16
101-55-3	4-Bromophenyl-phenylether	0.431	U	0.038	0.431
59-50-7	4-Chloro-3-methylphenol	0.431	U	0.034	0.431
106-47-8	4-Chloroaniline	0.431	U	0.043	0.431
7005-72-3	4-Chlorophenyl-phenylether	0.431	U	0.048	0.431
100-01-6	4-Nitroaniline	2.16	U	0.080	2.16
100-02-7	4-Nitrophenol	2.16	U	0.149	2.16
83-32-9	Acenaphthene	0.086	U	0.024	0.086
208-96-8	Acenaphthylene	0.045	J	0.015	0.086
98-86-2	Acetophenone	0.431	U	0.027	0.431
62-53-3	Aniline	0.431	U	0.023	0.431
120-12-7	Anthracene	0.053	J	0.015	0.086
1912-24-9	Atrazine (Aatrex)	0.862	U	0.064	0.862
100-52-7	Benzaldehyde	0.862	U	0.039	0.862

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30 Units: g  
 Level: (low/med) LOW  
 % Moisture: 23.5 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: SC-W  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7991  
 Lab Sample ID: 21101140512  
 Date Collected: 01/13/11 Time: 1645  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 2000  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

CAS NO.	COMPOUND	RESULT	MDL	RL
92-87-5	Benzidine	2.16	U	2.16
56-55-3	Benzo(a)anthracene	0.094		0.018
50-32-8	Benzo(a)pyrene	0.103		0.025
205-99-2	Benzo(b)fluoranthene	0.293	J	0.013
191-24-2	Benzo(g,h,i)perylene	0.328	J	0.012
207-08-9	Benzo(k)fluoranthene	0.065	J	0.020
65-85-0	Benzoic acid	2.16	U	0.149
100-51-6	Benzyl alcohol	0.431	U	0.050
92-52-4	Biphenyl	0.431	U	0.014
111-91-1	Bis(2-Chloroethoxy)methane	0.431	U	0.024
111-44-4	Bis(2-Chloroethyl)ether	0.431	U	0.033
108-60-1	bis(2-Chloroisopropyl)ether	0.431	U	0.022
117-81-7	bis(2-ethylhexyl)phthalate	0.154		0.017
85-68-7	Butylbenzylphthalate	0.431	U	0.00909
105-60-2	Caprolactam	0.431	U	0.046
86-74-8	Carbazole	0.431	U	0.031
218-01-9	Chrysene	0.133	J	0.015
84-74-2	Di-n-butylphthalate	0.431	U	0.010
117-84-0	Di-n-octylphthalate	0.431	U	0.014
53-70-3	Dibenz(a,h)anthracene	0.086	U	0.012
132-64-9	Dibenzofuran	0.431	U	0.015
84-66-2	Diethylphthalate	0.045	J	0.040
131-11-3	Dimethyl-phthalate	0.431	U	0.00955
206-44-0	Fluoranthene	0.178	J	0.00954
86-73-7	Fluorene	0.086	U	0.013
118-74-1	Hexachlorobenzene	0.431	U	0.052
77-47-4	Hexachlorocyclopentadiene	0.431	U	0.064
67-72-1	Hexachloroethane	0.431	U	0.064
193-39-5	Indeno(1,2,3-cd)pyrene	0.333	J	0.017

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SC-W

Lab Code: LA024 Case No.: \_\_\_\_\_

Contract: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Lab File ID: 2110114/e7991

Matrix: Solid

Lab Sample ID: 21101140512

Sample wt/vol: 30 Units: g

Date Collected: 01/13/11 Time: 1645

Level: (low/med) LOW

Date Received: 01/14/11

% Moisture: 23.5 decanted: (Y/N) \_\_\_\_\_

Date Extracted: 01/14/11

GC Column: RTX-5MS-30 ID: .25 (mm)

Date Analyzed: 01/14/11 Time: 2000

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: KCB

Injection Volume: 1.0 (µL)

Prep Method: 3550B

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Analytical Method: SW-846 8270

CONCENTRATION UNITS: mg/kg

Instrument ID: MSSV4

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

78-59-1	Isophorone	0.431	U	0.014	0.431
98-95-3	Nitrobenzene	0.431	U	0.020	0.431
87-86-5	Pentachlorophenol	2.16	U	0.035	2.16
85-01-8	Phenanthrene	0.105		0.018	0.086
108-95-2	Phenol	0.431	U	0.021	0.431
129-00-0	Pyrene	0.220	J	0.060	0.431
110-86-1	Pyridine	0.431	U	0.024	0.431
1319-77-3M	m,p-Cresol	0.431	U	0.076	0.431
621-64-7	N-Nitroso-di-n-propylamine	0.086	U	0.022	0.086
62-75-9	N-Nitrosodimethylamine	0.431	U	0.022	0.431
86-30-6	N-Nitrosodiphenylamine	0.431	U	0.014	0.431
95-48-7	o-Cresol	0.431	U	0.013	0.431

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: Solid

Sample wt/vol: 30.2 Units: g

Level: (low/med) LOW

% Moisture: 26.3 decanted: (Y/N) \_\_\_\_\_

GC Column: RTX-5MS-30 ID: .25 (mm)

Concentrated Extract Volume: 1000 (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: SC-E

Contract: \_\_\_\_\_

Lab File ID: 2110114/e7992

Lab Sample ID: 21101140513

Date Collected: 01/13/11 Time: 1655

Date Received: 01/14/11

Date Extracted: 01/14/11

Date Analyzed: 01/14/11 Time: 2016

Dilution Factor: 1 Analyst: KCB

Prep Method: 3550B

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

122-66-7	1,2 Diphenylhydrazine	0.445	U	0.010	0.445
95-95-4	2,4,5-Trichlorophenol	0.445	U	0.053	0.445
88-06-2	2,4,6-Trichlorophenol	0.445	U	0.070	0.445
120-83-2	2,4-Dichlorophenol	0.445	U	0.072	0.445
105-67-9	2,4-Dimethylphenol	0.445	U	0.057	0.445
51-28-5	2,4-Dinitrophenol	2.22	U	0.238	2.22
121-14-2	2,4-Dinitrotoluene	0.445	U	0.063	0.445
606-20-2	2,6-Dinitrotoluene	0.445	U	0.026	0.445
91-58-7	2-Chloronaphthalene	0.445	U	0.024	0.445
95-57-8	2-Chlorophenol	0.445	U	0.034	0.445
91-57-6	2-Methylnaphthalene	0.073	J	0.024	0.089
88-74-4	2-Nitroaniline	2.22	U	0.050	2.22
88-75-5	2-Nitrophenol	0.445	U	0.020	0.445
91-94-1	3,3'-Dichlorobenzidine	0.889	U	0.284	0.889
99-09-2	3-Nitroaniline	2.22	U	0.054	2.22
534-52-1	2-Methyl-4,6-dinitrophenol	2.22	U	0.044	2.22
101-55-3	4-Bromophenyl-phenylether	0.445	U	0.039	0.445
59-50-7	4-Chloro-3-methylphenol	0.445	U	0.035	0.445
106-47-8	4-Chloroaniline	0.445	U	0.044	0.445
7005-72-3	4-Chlorophenyl-phenylether	0.445	U	0.049	0.445
100-01-6	4-Nitroaniline	2.22	U	0.083	2.22
100-02-7	4-Nitrophenol	2.22	U	0.154	2.22
83-32-9	Acenaphthene	0.089	U	0.025	0.089
208-96-8	Acenaphthylene	0.089	U	0.015	0.089
98-86-2	Acetophenone	0.445	U	0.028	0.445
62-53-3	Aniline	0.445	U	0.024	0.445
120-12-7	Anthracene	0.025	J	0.016	0.089
1912-24-9	Atrazine (Aatrex)	0.889	U	0.066	0.889
100-52-7	Benzaldehyde	0.889	U	0.040	0.889

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: SC-E

Lab Code: LA024 Case No.: \_\_\_\_\_

Contract: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Lab File ID: 2110114/e7992

Matrix: Solid

Lab Sample ID: 21101140513

Sample wt/vol: 30.2 Units: g

Date Collected: 01/13/11 Time: 1655

Level: (low/med) LOW

Date Received: 01/14/11

% Moisture: 26.3 decanted: (Y/N) \_\_\_\_\_

Date Extracted: 01/14/11

GC Column: RTX-5MS-30 ID: .25 (mm)

Date Analyzed: 01/14/11 Time: 2016

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: KCB

Injection Volume: 1.0 (µL)

Prep Method: 3550B

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

CAS NO.	COMPOUND	RESULT	MDL	RL
92-87-5	Benidine	2.22	U	2.22
56-55-3	Benzo(a)anthracene	0.060	J	0.019
50-32-8	Benzo(a)pyrene	0.062	J	0.026
205-99-2	Benzo(b)fluoranthene	0.244	J	0.014
191-24-2	Benzo(g,h,i)perylene	0.228	J	0.012
207-08-9	Benzo(k)fluoranthene	0.038	J	0.020
65-85-0	Benzoic acid	2.22	U	0.154
100-51-6	Benzyl alcohol	0.445	U	0.052
92-52-4	Biphenyl	0.445	U	0.015
111-91-1	Bis(2-Chloroethoxy)methane	0.445	U	0.025
111-44-4	Bis(2-Chloroethyl)ether	0.445	U	0.034
108-60-1	bis(2-Chloroisopropyl)ether	0.445	U	0.023
117-81-7	bis(2-ethylhexyl)phthalate	0.123		0.017
85-68-7	Butylbenzylphthalate	0.445	U	0.00938
105-60-2	Caprolactam	0.445	U	0.047
86-74-8	Carbazole	0.445	U	0.032
218-01-9	Chrysene	0.081	J	0.015
84-74-2	Di-n-butylphthalate	0.445	U	0.011
117-84-0	Di-n-octylphthalate	0.445	U	0.015
53-70-3	Dibenz(a,h)anthracene	0.089	U	0.012
132-64-9	Dibenzofuran	0.445	U	0.015
84-66-2	Diethylphthalate	0.445	U	0.041
131-11-3	Dimethyl-phthalate	0.445	U	0.00985
206-44-0	Fluoranthene	0.111	J	0.00984
86-73-7	Fluorene	0.018	J	0.014
118-74-1	Hexachlorobenzene	0.445	U	0.053
77-47-4	Hexachlorocyclopentadiene	0.445	U	0.066
67-72-1	Hexachloroethane	0.445	U	0.066
193-39-5	Indeno(1,2,3-cd)pyrene	0.259	J	0.018

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30.2 Units: g  
 Level: (low/med) LOW  
 % Moisture: 26.3 decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: SC-E  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7992  
 Lab Sample ID: 21101140513  
 Date Collected: 01/13/11 Time: 1655  
 Date Received: 01/14/11  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 2016  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4  
 Prep Batch: 448916 Analytical Batch: 448983

CONCENTRATION UNITS: mg/kg

**CAS NO. COMPOUND**

**RESULT**

**MDL**

**RL**

78-59-1	Isophorone	0.445	U	0.015	0.445
98-95-3	Nitrobenzene	0.445	U	0.021	0.445
87-86-5	Pentachlorophenol	2.22	U	0.036	2.22
85-01-8	Phenanthrene	0.077	J	0.018	0.089
108-95-2	Phenol	0.445	U	0.022	0.445
129-00-0	Pyrene	0.122	J	0.062	0.445
110-86-1	Pyridine	0.445	U	0.025	0.445
1319-77-3M	m,p-Cresol	0.445	U	0.078	0.445
621-64-7	N-Nitroso-di-n-propylamine	0.089	U	0.022	0.089
62-75-9	N-Nitrosodimethylamine	0.445	U	0.023	0.445
86-30-6	N-Nitrosodiphenylamine	0.445	U	0.014	0.445
95-48-7	o-Cresol	0.445	U	0.014	0.445

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: Water

Sample wt/vol: 990 Units: mL

Level: (low/med) LOW

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

GC Column: RTX-5MS-30 ID: .25 (mm)

Concentrated Extract Volume: 1000 (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: EQUIPMENT BLANK

Contract: \_\_\_\_\_

Lab File ID: 2110114/e7976

Lab Sample ID: 21101140514

Date Collected: 01/13/11 Time: 1710

Date Received: 01/14/11

Date Extracted: 01/14/11

Date Analyzed: 01/14/11 Time: 1549

Dilution Factor: 1 Analyst: KCB

Prep Method: 3510C

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/L

Prep Batch: 448924 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT**

**MDL**

**RL**

122-66-7	1,2-Diphenylhydrazine	0.010	U	0.000192	0.010
95-95-4	2,4,5-Trichlorophenol	0.010	U	0.000126	0.010
88-06-2	2,4,6-Trichlorophenol	0.010	U	0.000167	0.010
120-83-2	2,4-Dichlorophenol	0.010	U	0.000210	0.010
105-67-9	2,4-Dimethylphenol	0.010	U	0.000198	0.010
51-28-5	2,4-Dinitrophenol	0.010	U	0.00305	0.010
121-14-2	2,4-Dinitrotoluene	0.010	U	0.000251	0.010
606-20-2	2,6-Dinitrotoluene	0.010	U	0.000292	0.010
91-58-7	2-Chloronaphthalene	0.010	U	0.000216	0.010
95-57-8	2-Chlorophenol	0.010	U	0.000184	0.010
91-57-6	2-Methylnaphthalene	0.010	U	0.000213	0.010
88-74-4	2-Nitroaniline	0.010	U	0.000152	0.010
88-75-5	2-Nitrophenol	0.010	U	0.000153	0.010
91-94-1	3,3'-Dichlorobenzidine	0.010	U	0.000168	0.010
99-09-2	3-Nitroaniline	0.010	U	0.00129	0.010
534-52-1	2-Methyl-4,6-dinitrophenol	0.010	U	0.00244	0.010
101-55-3	4-Bromophenyl-phenylether	0.010	U	0.000282	0.010
59-50-7	4-Chloro-3-methylphenol	0.010	U	0.000273	0.010
106-47-8	4-Chloroaniline	0.010	U	0.000139	0.010
7005-72-3	4-Chlorophenyl-phenylether	0.010	U	0.000261	0.010
100-01-6	4-Nitroaniline	0.010	U	0.000231	0.010
100-02-7	4-Nitrophenol	0.010	U	0.000705	0.010
83-32-9	Acenaphthene	0.010	U	0.000204	0.010
208-96-8	Acenaphthylene	0.010	U	0.000119	0.010
98-86-2	Acetophenone	0.010	U	0.000245	0.010
62-53-3	Aniline	0.010	U	0.000212	0.010
120-12-7	Anthracene	0.010	U	0.000159	0.010
1912-24-9	Atrazine (Aatrex)	0.051	U	0.000321	0.051
100-52-7	Benzaldehyde	0.051	U	0.00335	0.051

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Lab Code: LA024 Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Matrix: Water

Sample wt/vol: 990 Units: mL

Level: (low/med) LOW

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

GC Column: RTX-5MS-30 ID: .25 (mm)

Concentrated Extract Volume: 1000 (µL)

Injection Volume: 1.0 (µL)

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: EQUIPMENT BLANK

Contract: \_\_\_\_\_

Lab File ID: 2110114/e7976

Lab Sample ID: 21101140514

Date Collected: 01/13/11 Time: 1710

Date Received: 01/14/11

Date Extracted: 01/14/11

Date Analyzed: 01/14/11 Time: 1549

Dilution Factor: 1 Analyst: KCB

Prep Method: 3510C

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/L

Prep Batch: 448924 Analytical Batch: 448983

CAS NO.	COMPOUND	RESULT	MDL	RL
92-87-5	Benzidine	0.051	U	0.00310
56-55-3	Benzo(a)anthracene	0.010	U	0.000159
50-32-8	Benzo(a)pyrene	0.010	U	0.000123
205-99-2	Benzo(b)fluoranthene	0.010	U	0.000242
191-24-2	Benzo(g,h,i)perylene	0.010	U	0.000162
207-08-9	Benzo(k)fluoranthene	0.010	U	0.000239
65-85-0	Benzoic acid	0.010	U	0.00343
100-51-6	Benzyl alcohol	0.010	U	0.000320
92-52-4	Biphenyl	0.010	U	0.000140
111-91-1	Bis(2-Chloroethoxy)methane	0.010	U	0.000305
111-44-4	Bis(2-Chloroethyl)ether	0.010	U	0.000139
108-60-1	bis(2-Chloroisopropyl)ether	0.010	U	0.000139
117-81-7	bis(2-ethylhexyl)phthalate	0.010	U	0.000242
85-68-7	Butylbenzylphthalate	0.010	U	0.000346
105-60-2	Caprolactam	0.010	U	0.00118
86-74-8	Carbazole	0.010	U	0.000211
218-01-9	Chrysene	0.010	U	0.000267
84-74-2	Di-n-butylphthalate	0.010	U	0.000145
117-84-0	Di-n-octylphthalate	0.010	U	0.000263
53-70-3	Dibenz(a,h)anthracene	0.010	U	0.000263
132-64-9	Dibenzofuran	0.010	U	0.000126
84-66-2	Diethylphthalate	0.010	U	0.000099
131-11-3	Dimethyl-phthalate	0.010	U	0.000151
206-44-0	Fluoranthene	0.010	U	0.000175
86-73-7	Fluorene	0.010	U	0.000135
118-74-1	Hexachlorobenzene	0.010	U	0.000260
77-47-4	Hexachlorocyclopentadiene	0.010	U	0.000132
67-72-1	Hexachloroethane	0.010	U	0.00111
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	U	0.000270

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: EQUIPMENT BLANK

Lab Code: LA024 Case No.: \_\_\_\_\_

Contract: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Lab File ID: 2110114/e7976

Matrix: Water

Lab Sample ID: 21101140514

Sample wt/vol: 990 Units: mL

Date Collected: 01/13/11 Time: 1710

Level: (low/med) LOW

Date Received: 01/14/11

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 01/14/11

GC Column: RTX-5MS-30 ID: .25 (mm)

Date Analyzed: 01/14/11 Time: 1549

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: KCB

Injection Volume: 1.0 (µL)

Prep Method: 3510C

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/L

Prep Batch: 448924 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

78-59-1	Isophorone	0.010	U	0.000119	0.010
98-95-3	Nitrobenzene	0.010	U	0.000222	0.010
87-86-5	Pentachlorophenol	0.010	U	0.00154	0.010
85-01-8	Phenanthrene	0.010	U	0.000152	0.010
108-95-2	Phenol	0.010	U	0.000244	0.010
129-00-0	Pyrene	0.010	U	0.000203	0.010
110-86-1	Pyridine	0.010	U	0.00156	0.010
1319-77-3M	m,p-Cresol	0.010	U	0.000335	0.010
621-64-7	N-Nitroso-di-n-propylamine	0.010	U	0.000376	0.010
62-75-9	N-Nitrosodimethylamine	0.010	U	0.000520	0.010
86-30-6	N-Nitrosodiphenylamine	0.010	U	0.000172	0.010
95-48-7	o-Cresol	0.010	U	0.000184	0.010

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30.1 Units: g  
 Level: (low/med) LOW  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: MB912490  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7977  
 Lab Sample ID: 912490  
 Date Collected: \_\_\_\_\_ Time: \_\_\_\_\_  
 Date Received: \_\_\_\_\_  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1606  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4  
 Prep Batch: 448916 Analytical Batch: 448983

CONCENTRATION UNITS: mg/kg

**CAS NO. COMPOUND**

**RESULT**

**MDL**

**RL**

208-96-8	Acenaphthylene	0.066	U	0.011	0.066
120-12-7	Anthracene	0.066	U	0.012	0.066
56-55-3	Benzo(a)anthracene	0.066	U	0.014	0.066
92-87-5	Benzidine	1.64	U	1.64	1.64
205-99-2	Benzo(b)fluoranthene	0.329	U	0.010	0.329
207-08-9	Benzo(k)fluoranthene	0.329	U	0.015	0.329
191-24-2	Benzo(g,h,i)perylene	0.329	U	0.00909	0.329
50-32-8	Benzo(a)pyrene	0.066	U	0.019	0.066
65-85-0	Benzoic acid	1.64	U	0.114	1.64
85-68-7	Butylbenzylphthalate	0.329	U	0.00694	0.329
111-91-1	Bis(2-Chloroethoxy)methane	0.329	U	0.018	0.329
111-44-4	Bis(2-Chloroethyl)ether	0.329	U	0.025	0.329
108-60-1	bis(2-Chloroisopropyl)ether	0.329	U	0.017	0.329
117-81-7	bis(2-ethylhexyl)phthalate	0.066	U	0.013	0.066
101-55-3	4-Bromophenyl-phenylether	0.329	U	0.029	0.329
86-74-8	Carbazole	0.329	U	0.024	0.329
7005-72-3	4-Chlorophenyl-phenylether	0.329	U	0.037	0.329
218-01-9	Chrysene	0.329	U	0.011	0.329
53-70-3	Dibenz(a,h)anthracene	0.066	U	0.00903	0.066
132-64-9	Dibenzofuran	0.329	U	0.011	0.329
91-94-1	3,3'-Dichlorobenzidine	0.658	U	0.210	0.658
120-83-2	2,4-Dichlorophenol	0.329	U	0.053	0.329
84-66-2	Diethylphthalate	0.329	U	0.030	0.329
105-67-9	2,4-Dimethylphenol	0.329	U	0.042	0.329
131-11-3	Dimethyl-phthalate	0.329	U	0.00729	0.329
117-84-0	Di-n-octylphthalate	0.329	U	0.011	0.329
51-28-5	2,4-Dinitrophenol	1.64	U	0.176	1.64
606-20-2	2,6-Dinitrotoluene	0.329	U	0.019	0.329
206-44-0	Fluoranthene	0.329	U	0.00728	0.329

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL

Sample ID: MB912490

Lab Code: LA024 Case No.: \_\_\_\_\_

Contract: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: 211011405

Lab File ID: 2110114/e7977

Matrix: Solid

Lab Sample ID: 912490

Sample wt/vol: 30.1 Units: g

Date Collected: \_\_\_\_\_ Time: \_\_\_\_\_

Level: (low/med) LOW

Date Received: \_\_\_\_\_

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 01/14/11

GC Column: RTX-5MS-30 ID: .25 (mm)

Date Analyzed: 01/14/11 Time: 1606

Concentrated Extract Volume: 1000 (µL)

Dilution Factor: 1 Analyst: KCB

Injection Volume: 1.0 (µL)

Prep Method: 3550B

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Analytical Method: SW-846 8270

Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

CAS NO.	COMPOUND	RESULT	MDL	RL
86-73-7	Fluorene	0.066	U	0.010
118-74-1	Hexachlorobenzene	0.329	U	0.039
77-47-4	Hexachlorocyclopentadiene	0.329	U	0.049
67-72-1	Hexachloroethane	0.329	U	0.049
78-59-1	Isophorone	0.329	U	0.011
193-39-5	Indeno(1,2,3-cd)pyrene	0.329	U	0.013
91-57-6	2-Methylnaphthalene	0.066	U	0.018
95-48-7	o-Cresol	0.329	U	0.010
98-95-3	Nitrobenzene	0.329	U	0.015
88-75-5	2-Nitrophenol	0.329	U	0.015
62-75-9	N-Nitrosodimethylamine	0.329	U	0.017
86-30-6	N-Nitrosodiphenylamine	0.329	U	0.010
85-01-8	Phenanthrene	0.066	U	0.013
95-95-4	2,4,5-Trichlorophenol	0.329	U	0.039
88-06-2	2,4,6-Trichlorophenol	0.329	U	0.052
100-51-6	Benzyl alcohol	0.329	U	0.038
62-53-3	Aniline	0.329	U	0.018
110-86-1	Pyridine	0.329	U	0.019
105-60-2	Caprolactam	0.329	U	0.035
98-86-2	Acetophenone	0.329	U	0.020
99-09-2	3-Nitroaniline	1.64	U	0.040
100-01-6	4-Nitroaniline	1.64	U	0.061
84-74-2	Di-n-butylphthalate	0.329	U	0.00794
122-66-7	1,2 Diphenylhydrazine	0.329	U	0.00749
88-74-4	2-Nitroaniline	1.64	U	0.037
91-58-7	2-Chloronaphthalene	0.329	U	0.018
106-47-8	4-Chloroaniline	0.329	U	0.033
1912-24-9	Atrazine (Aatrex)	0.658	U	0.049
100-52-7	Benzaldehyde	0.658	U	0.030

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Solid  
 Sample wt/vol: 30.1 Units: g  
 Level: (low/med) LOW  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: MB912490  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7977  
 Lab Sample ID: 912490  
 Date Collected: \_\_\_\_\_ Time: \_\_\_\_\_  
 Date Received: \_\_\_\_\_  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1606  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3550B  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/kg

Prep Batch: 448916 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

92-52-4	Biphenyl	0.329	U	0.011	0.329
1319-77-3M	m,p-Cresol	0.329	U	0.058	0.329
534-52-1	2-Methyl-4,6-dinitrophenol	1.64	U	0.032	1.64
108-95-2	Phenol	0.329	U	0.016	0.329
95-57-8	2-Chlorophenol	0.329	U	0.025	0.329
621-64-7	N-Nitroso-di-n-propylamine	0.066	U	0.017	0.066
59-50-7	4-Chloro-3-methylphenol	0.329	U	0.026	0.329
83-32-9	Acenaphthene	0.066	U	0.019	0.066
100-02-7	4-Nitrophenol	1.64	U	0.114	1.64
121-14-2	2,4-Dinitrotoluene	0.329	U	0.046	0.329
87-86-5	Pentachlorophenol	1.64	U	0.027	1.64
129-00-0	Pyrene	0.329	U	0.046	0.329

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Water  
 Sample wt/vol: 1000 Units: mL  
 Level: (low/med) LOW  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: MB912529  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7973  
 Lab Sample ID: 912529  
 Date Collected: \_\_\_\_\_ Time: \_\_\_\_\_  
 Date Received: \_\_\_\_\_  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1459  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3510C  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4

CONCENTRATION UNITS: mg/L

Prep Batch: 448924 Analytical Batch: 448983

**CAS NO. COMPOUND**

**RESULT MDL RL**

208-96-8	Acenaphthylene	0.010	U	0.000118	0.010
120-12-7	Anthracene	0.010	U	0.000157	0.010
56-55-3	Benzo(a)anthracene	0.010	U	0.000157	0.010
92-87-5	Benzidine	0.050	U	0.00307	0.050
205-99-2	Benzo(b)fluoranthene	0.010	U	0.000240	0.010
207-08-9	Benzo(k)fluoranthene	0.010	U	0.000237	0.010
191-24-2	Benzo(g,h,i)perylene	0.010	U	0.000160	0.010
50-32-8	Benzo(a)pyrene	0.010	U	0.000122	0.010
65-85-0	Benzoic acid	0.010	U	0.00340	0.010
85-68-7	Butylbenzylphthalate	0.010	U	0.000343	0.010
111-91-1	Bis(2-Chloroethoxy)methane	0.010	U	0.000302	0.010
111-44-4	Bis(2-Chloroethyl)ether	0.010	U	0.000138	0.010
108-60-1	bis(2-Chloroisopropyl)ether	0.010	U	0.000138	0.010
117-81-7	bis(2-ethylhexyl)phthalate	0.010	U	0.000240	0.010
101-55-3	4-Bromophenyl-phenylether	0.010	U	0.000279	0.010
86-74-8	Carbazole	0.010	U	0.000209	0.010
7005-72-3	4-Chlorophenyl-phenylether	0.010	U	0.000258	0.010
218-01-9	Chrysene	0.010	U	0.000264	0.010
53-70-3	Dibenz(a,h)anthracene	0.010	U	0.000260	0.010
132-64-9	Dibenzofuran	0.010	U	0.000125	0.010
91-94-1	3,3'-Dichlorobenzidine	0.010	U	0.000166	0.010
120-83-2	2,4-Dichlorophenol	0.010	U	0.000208	0.010
84-66-2	Diethylphthalate	0.010	U	0.000098	0.010
105-67-9	2,4-Dimethylphenol	0.010	U	0.000196	0.010
131-11-3	Dimethyl-phthalate	0.010	U	0.000149	0.010
117-84-0	Di-n-octylphthalate	0.010	U	0.000260	0.010
51-28-5	2,4-Dinitrophenol	0.010	U	0.00302	0.010
606-20-2	2,6-Dinitrotoluene	0.010	U	0.000289	0.010
206-44-0	Fluoranthene	0.010	U	0.000173	0.010

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Water  
 Sample wt/vol: 1000 Units: mL  
 Level: (low/med) LOW  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: MB912529  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7973  
 Lab Sample ID: 912529  
 Date Collected: \_\_\_\_\_ Time: \_\_\_\_\_  
 Date Received: \_\_\_\_\_  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1459  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3510C  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4  
 Prep Batch: 448924 Analytical Batch: 448983

CONCENTRATION UNITS: mg/L

**CAS NO. COMPOUND**

**RESULT**

**MDL**

**RL**

86-73-7	Fluorene	0.010	U	0.000134	0.010
118-74-1	Hexachlorobenzene	0.010	U	0.000257	0.010
77-47-4	Hexachlorocyclopentadiene	0.010	U	0.000131	0.010
67-72-1	Hexachloroethane	0.010	U	0.00110	0.010
78-59-1	Isophorone	0.010	U	0.000118	0.010
193-39-5	Indeno(1,2,3-cd)pyrene	0.010	U	0.000267	0.010
91-57-6	2-Methylnaphthalene	0.010	U	0.000211	0.010
95-48-7	o-Cresol	0.010	U	0.000182	0.010
98-95-3	Nitrobenzene	0.010	U	0.000220	0.010
88-75-5	2-Nitrophenol	0.010	U	0.000151	0.010
62-75-9	N-Nitrosodimethylamine	0.010	U	0.000515	0.010
86-30-6	N-Nitrosodiphenylamine	0.010	U	0.000170	0.010
85-01-8	Phenanthrene	0.010	U	0.000150	0.010
95-95-4	2,4,5-Trichlorophenol	0.010	U	0.000125	0.010
88-06-2	2,4,6-Trichlorophenol	0.010	U	0.000165	0.010
100-51-6	Benzyl alcohol	0.010	U	0.000317	0.010
62-53-3	Aniline	0.010	U	0.000210	0.010
110-86-1	Pyridine	0.010	U	0.00154	0.010
105-60-2	Caprolactam	0.010	U	0.00117	0.010
98-86-2	Acetophenone	0.010	U	0.000243	0.010
99-09-2	3-Nitroaniline	0.010	U	0.00128	0.010
100-01-6	4-Nitroaniline	0.010	U	0.000229	0.010
84-74-2	Di-n-butylphthalate	0.010	U	0.000144	0.010
122-66-7	1,2 Diphenylhydrazine	0.010	U	0.000190	0.010
88-74-4	2-Nitroaniline	0.010	U	0.000150	0.010
91-58-7	2-Chloronaphthalene	0.010	U	0.000214	0.010
106-47-8	4-Chloroaniline	0.010	U	0.000138	0.010
1912-24-9	Atrazine (Aatrex)	0.050	U	0.000318	0.050
100-52-7	Benzaldehyde	0.050	U	0.00332	0.050

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Matrix: Water  
 Sample wt/vol: 1000 Units: mL  
 Level: (low/med) LOW  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Concentrated Extract Volume: 1000 (µL)  
 Injection Volume: 1.0 (µL)  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Sample ID: MB912529  
 Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7973  
 Lab Sample ID: 912529  
 Date Collected: \_\_\_\_\_ Time: \_\_\_\_\_  
 Date Received: \_\_\_\_\_  
 Date Extracted: 01/14/11  
 Date Analyzed: 01/14/11 Time: 1459  
 Dilution Factor: 1 Analyst: KCB  
 Prep Method: 3510C  
 Analytical Method: SW-846 8270  
 Instrument ID: MSSV4  
 Prep Batch: 448924 Analytical Batch: 448983

CONCENTRATION UNITS: mg/L

CAS NO.	COMPOUND	RESULT		MDL	RL
92-52-4	Biphenyl	0.010	U	0.000139	0.010
1319-77-3M	m,p-Cresol	0.010	U	0.000332	0.010
534-52-1	2-Methyl-4,6-dinitrophenol	0.010	U	0.00242	0.010
108-95-2	Phenol	0.010	U	0.000242	0.010
95-57-8	2-Chlorophenol	0.010	U	0.000182	0.010
621-64-7	N-Nitroso-di-n-propylamine	0.010	U	0.000372	0.010
59-50-7	4-Chloro-3-methylphenol	0.010	U	0.000270	0.010
83-32-9	Acenaphthene	0.010	U	0.000202	0.010
100-02-7	4-Nitrophenol	0.010	U	0.000698	0.010
121-14-2	2,4-Dinitrotoluene	0.010	U	0.000248	0.010
87-86-5	Pentachlorophenol	0.010	U	0.00152	0.010
129-00-0	Pyrene	0.010	U	0.000201	0.010

2C  
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Method: SW-846 8270 Level: ( low/med ) LOW

	<b>EPA SAMPLE NO.</b>	<b>SMC1</b>	<b>#</b>	<b>SMC2</b>	<b>#</b>	<b>SMC3</b>	<b>#</b>	<b>SMC4</b>	<b>#</b>	<b>SMC5</b>	<b>#</b>	<b>SMC6</b>	<b>#</b>	<b>TOT OUT</b>
1.	EQUIPMENT BLANK	91		91		109		41		61		80		0
2.	MB912529	79		80		98		37		56		66		0
3.	LCS912530	94		98		99		44		66		91		0
4.	LCSD912531	87		89		97		42		63		83		0

CONTROL LIMITS

SMC 1	Nitrobenzene-d5	52	120
SMC 2	2-Fluorobiphenyl	16	128
SMC 3	Terphenyl-d14	43	138
SMC 4	Phenol-d5	10	120
SMC 5	2-Fluorophenol	10	120
SMC 6	2,4,6-Tribromophenol	52	121

# Column to be used to flag recovery limits

\* Value outside of contract required limits

D Surrogate diluted out

2D  
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Method: SW-846 8270 Level: ( low/med ) LOW

EPA SAMPLE NO.	SMC1	#	SMC2	#	SMC3	#	SMC4	#	SMC5	#	SMC6	#	TOT OUT
1. T-15-F	73		74		88		73		72		69		0
2. T-15-F MS	80		86		83		74		77		73		0
3. T-15-F MSD	76		77		85		74		74		67		0
4. T-21-F	82		85		88		70		71		62		0
5. T-21-F	0	D	0	D	0	D	0	D	0	D	0	D	0
6. NC-0-0.3	75		78		68		67		70		64		0
7. T-2-WEST	77		77		79		75		75		65		0
8. T-6-FLOOR	79		82		84		75		77		65		0
9. T-6-EAST	76		77		78		78		77		66		0
10. T-6-SOUTH	84		82		80		79		78		71		0
11. T-6-NORTH	81		80		79		78		76		64		0
12. BLIND DUP	82		81		79		79		78		68		0
13. SC-W	83		80		71		73		75		72		0
14. SC-E	74		77		80		75		73		59		0
15. MB912490	75		76		84		70		72		66		0
16. LCS912491	83		89		85		78		80		85		0
17. LCSD912492	82		90		91		81		79		77		0

CONTROL LIMITS

SMC 1	Nitrobenzene-d5	46	123
SMC 2	2-Fluorobiphenyl	47	127
SMC 3	Terphenyl-d14	38	167
SMC 4	Phenol-d5	43	123
SMC 5	2-Fluorophenol	51	119
SMC 6	2,4,6-Tribromophenol	44	121

# Column to be used to flag recovery limits

\* Value outside of contract required limits

D Surrogate diluted out

3C  
WATER SEMIVOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Contract: \_\_\_\_\_

Method: SW-846 8270

Prep Batch: 448924

Analytical Batch.: 448983

**Spike HSN : 912530**

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS % REC	REC FLAG	QC.	LIMITS
1,2-Diphenylhydrazine	mg/L	.1	0	.096	96		20	- 120
2,4,5-Trichlorophenol	mg/L	.1	0	.094	94		60	- 120
2,4,6-Trichlorophenol	mg/L	.1	0	.085	85		59	- 120
2,4-Dichlorophenol	mg/L	.1	0	.086	86		55	- 120
2,4-Dimethylphenol	mg/L	.1	0	.085	85		14	- 122
2,4-Dinitrophenol	mg/L	.1	0	.08	80		18	- 137
2,4-Dinitrotoluene	mg/L	.1	0	.093	93		37	- 138
2,6-Dinitrotoluene	mg/L	.1	0	.098	98		56	- 128
2-Chloronaphthalene	mg/L	.1	0	.096	96		48	- 120
2-Chlorophenol	mg/L	.1	0	.085	85		42	- 120
2-Methyl-4,6-dinitrophenol	mg/L	.1	0	.079	79		49	- 120
2-Methylnaphthalene	mg/L	.1	0	.087	87		40	- 120
2-Nitroaniline	mg/L	.1	0	.089	89		48	- 120
2-Nitrophenol	mg/L	.1	0	.09	90		59	- 120
3,3'-Dichlorobenzidine	mg/L	.1	0	.09	90		51	- 154
3-Nitroaniline	mg/L	.1	0	.089	89		34	- 120
4-Bromophenyl-phenylether	mg/L	.1	0	.105	105		61	- 120
4-Chloro-3-methylphenol	mg/L	.1	0	.082	82		44	- 120
4-Chloroaniline	mg/L	.1	0	.1	100		30	- 120
4-Chlorophenyl-phenylether	mg/L	.099	0	.099	100		52	- 120
4-Nitroaniline	mg/L	.101	0	.091	90		38	- 120
4-Nitrophenol	mg/L	.1	0	.043	43		10	- 120
Acenaphthene	mg/L	.1	0	.101	101		52	- 120
Acenaphthylene	mg/L	.1	0	.117	117		55	- 120
Acetophenone	mg/L	.1	0	.096	96		60	- 124
Aniline	mg/L	.1	0	.176	176	*	19	- 124
Anthracene	mg/L	.1	0	.106	106		58	- 120
Atrazine (Aatrex)	mg/L	.1	0	.138	138		39	- 148
Benzaldehyde	mg/L	.1	0	.474	474	*	40	- 118
Benzo(a)anthracene	mg/L	.1	0	.104	104		56	- 120
Benzo(a)pyrene	mg/L	.1	0	.11	110		56	- 120
Benzo(b)fluoranthene	mg/L	.1	0	.098	98		55	- 120
Benzo(g,h,i)perylene	mg/L	.1	0	.09	90		44	- 132
Benzo(k)fluoranthene	mg/L	.1	0	.108	108		49	- 121
Benzoic acid	mg/L	.1	0	.034	34		10	- 120

RPD : 0 out of 69 outside limits

Spike Recovery: 4 out of 138 outside limits

FORM III SV-1

3C  
WATER SEMIVOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Contract: \_\_\_\_\_

Method: SW-846 8270

Prep Batch: 448924

Analytical Batch.: 448983

Benzyl alcohol	mg/L	.1	0	.086	86	32 - 120
Biphenyl	mg/L	.1	0	.091	91	39 - 122
Bis(2-Chloroethoxy)methane	mg/L	.1	0	.096	96	56 - 120
Bis(2-Chloroethyl)ether	mg/L	.1	0	.096	96	37 - 120
Butylbenzylphthalate	mg/L	.1	0	.097	97	62 - 122
Caprolactam	mg/L	.1	0	.031	31	10 - 120
Carbazole	mg/L	.1	0	.09	90	47 - 120
Chrysene	mg/L	.1	0	.103	103	58 - 120
Di-n-butylphthalate	mg/L	.1	0	.098	98	62 - 122
Di-n-octylphthalate	mg/L	.1	0	.084	84	56 - 133
Dibenz(a,h)anthracene	mg/L	.1	0	.085	85	50 - 138
Dibenzofuran	mg/L	.1	0	.093	93	54 - 120
Diethylphthalate	mg/L	.1	0	.101	101	56 - 120
Dimethyl-phthalate	mg/L	.1	0	.1	100	59 - 120
Fluoranthene	mg/L	.1	0	.096	96	55 - 120
Fluorene	mg/L	.1	0	.101	101	54 - 120
Hexachlorobenzene	mg/L	.1	0	.097	97	61 - 120
Hexachlorocyclopentadiene	mg/L	.1	0	.113	113	16 - 120
Hexachloroethane	mg/L	.1	0	.087	87	21 - 120
Indeno(1,2,3-cd)pyrene	mg/L	.1	0	.082	82	43 - 133
Isophorone	mg/L	.1	0	.094	94	53 - 120
N-Nitroso-di-n-propylamine	mg/L	.1	0	.094	94	47 - 120
N-Nitrosodimethylamine	mg/L	.1	0	.073	73	12 - 120
N-Nitrosodiphenylamine	mg/L	.098	0	.109	111	58 - 121
Nitrobenzene	mg/L	.1	0	.095	95	53 - 120
Pentachlorophenol	mg/L	.1	0	.075	75	25 - 158
Phenanthrene	mg/L	.1	0	.105	105	58 - 120
Phenol	mg/L	.1	0	.047	47	16 - 120
Pyrene	mg/L	.1	0	.116	116	54 - 120
Pyridine	mg/L	.1	0	.043	43	10 - 120
bis(2-Chloroisopropyl)ether	mg/L	.1	0	.094	94	47 - 120
bis(2-ethylhexyl)phthalate	mg/L	.1	0	.089	89	56 - 132
m,p-Cresol	mg/L	.1	0	.073	73	24 - 120
o-Cresol	mg/L	.1	0	.077	77	31 - 120

RPD: 0 out of 69 outside limits

Spike Recovery: 4 out of 138 outside limits

FORM III SV-1

3C  
WATER SEMIVOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Contract: \_\_\_\_\_

Method: SW-846 8270

Prep Batch: 448924

Analytical Batch.: 448983

**Spike Dupe HSN : 912531**

COMPOUND	UNITS	SPIKE ADDED	LCSD CONC.	LCSD % REC	REC FLAG	% RPD	RPD FLAG	QC. LIMITS REC	RPD
1,2-Diphenylhydrazine	mg/L	.1	.089	89		8		20 - 120	0 - 50
2,4,5-Trichlorophenol	mg/L	.1	.087	87		8		60 - 120	0 - 50
2,4,6-Trichlorophenol	mg/L	.1	.08	80		6		59 - 120	0 - 50
2,4-Dichlorophenol	mg/L	.1	.082	82		5		55 - 120	0 - 50
2,4-Dimethylphenol	mg/L	.1	.082	82		4		14 - 122	0 - 50
2,4-Dinitrophenol	mg/L	.1	.077	77		4		18 - 137	0 - 50
2,4-Dinitrotoluene	mg/L	.1	.088	88		6		37 - 138	0 - 30
2,6-Dinitrotoluene	mg/L	.1	.092	92		6		56 - 128	0 - 50
2-Chloronaphthalene	mg/L	.1	.092	92		4		48 - 120	0 - 50
2-Chlorophenol	mg/L	.1	.085	85		0		42 - 120	0 - 30
2-Methyl-4,6-dinitrophenol	mg/L	.1	.074	74		7		49 - 120	0 - 50
2-Methylnaphthalene	mg/L	.1	.084	84		4		40 - 120	0 - 50
2-Nitroaniline	mg/L	.1	.086	86		3		48 - 120	0 - 50
2-Nitrophenol	mg/L	.1	.086	86		5		59 - 120	0 - 50
3,3'-Dichlorobenzidine	mg/L	.1	.087	87		3		51 - 154	0 - 50
3-Nitroaniline	mg/L	.1	.085	85		5		34 - 120	0 - 50
4-Bromophenyl-phenylether	mg/L	.1	.101	101		4		61 - 120	0 - 50
4-Chloro-3-methylphenol	mg/L	.1	.08	80		2		44 - 120	0 - 30
4-Chloroaniline	mg/L	.1	.099	99		1		30 - 120	0 - 50
4-Chlorophenyl-phenylether	mg/L	.099	.094	95		5		52 - 120	0 - 50
4-Nitroaniline	mg/L	.101	.09	89		1		38 - 120	0 - 50
4-Nitrophenol	mg/L	.1	.041	41		5		10 - 120	0 - 30
Acenaphthene	mg/L	.1	.097	97		4		52 - 120	0 - 30
Acenaphthylene	mg/L	.1	.11	110		6		55 - 120	0 - 50
Acetophenone	mg/L	.1	.095	95		1		60 - 124	0 - 50
Aniline	mg/L	.1	.181	181	*	3		19 - 124	0 - 50
Anthracene	mg/L	.1	.101	101		5		58 - 120	0 - 50
Atrazine (Aatrex)	mg/L	.1	.136	136		1		39 - 148	0 - 50
Benzaldehyde	mg/L	.1	.469	469	*	1		40 - 118	0 - 50
Benzo(a)anthracene	mg/L	.1	.1	100		4		56 - 120	0 - 50
Benzo(a)pyrene	mg/L	.1	.105	105		5		56 - 120	0 - 50
Benzo(b)fluoranthene	mg/L	.1	.099	99		1		55 - 120	0 - 50
Benzo(g,h,i)perylene	mg/L	.1	.085	85		6		44 - 132	0 - 50
Benzo(k)fluoranthene	mg/L	.1	.1	100		8		49 - 121	0 - 50
Benzoic acid	mg/L	.1	.032	32		6		10 - 120	0 - 50

RPD : 0 out of 69 outside limits

Spike Recovery: 4 out of 138 outside limits

3C  
WATER SEMIVOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.:

SAS No.:

SDG No.: 211011405

Contract:

Method: SW-846 8270

Prep Batch: 448924

Analytical Batch.: 448983

Benzyl alcohol	mg/L	.1	.085	85		1		32 - 120	0 - 50
Biphenyl	mg/L	.1	.087	87		4		39 - 122	0 - 50
Bis(2-Chloroethoxy)methane	mg/L	.1	.094	94		2		56 - 120	0 - 50
Bis(2-Chloroethyl)ether	mg/L	.1	.096	96		0		37 - 120	0 - 50
Butylbenzylphthalate	mg/L	.1	.096	96		1		62 - 122	0 - 50
Caprolactam	mg/L	.1	.029	29		7		10 - 120	0 - 50
Carbazole	mg/L	.1	.088	88		2		47 - 120	0 - 50
Chrysene	mg/L	.1	.097	97		6		58 - 120	0 - 50
Di-n-butylphthalate	mg/L	.1	.096	96		2		62 - 122	0 - 50
Di-n-octylphthalate	mg/L	.1	.083	83		1		56 - 133	0 - 50
Dibenz(a,h)anthracene	mg/L	.1	.086	86		1		50 - 138	0 - 50
Dibenzofuran	mg/L	.1	.091	91		2		54 - 120	0 - 50
Diethylphthalate	mg/L	.1	.096	96		5		56 - 120	0 - 50
Dimethyl-phthalate	mg/L	.1	.096	96		4		59 - 120	0 - 50
Fluoranthene	mg/L	.1	.095	95		1		55 - 120	0 - 50
Fluorene	mg/L	.1	.096	96		5		54 - 120	0 - 50
Hexachlorobenzene	mg/L	.1	.091	91		6		61 - 120	0 - 50
Hexachlorocyclopentadiene	mg/L	.1	.109	109		4		16 - 120	0 - 50
Hexachloroethane	mg/L	.1	.085	85		2		21 - 120	0 - 50
Indeno(1,2,3-cd)pyrene	mg/L	.1	.074	74		10		43 - 133	0 - 50
Isophorone	mg/L	.1	.091	91		3		53 - 120	0 - 50
N-Nitroso-di-n-propylamine	mg/L	.1	.095	95		1		47 - 120	0 - 30
N-Nitrosodimethylamine	mg/L	.1	.073	73		0		12 - 120	0 - 50
N-Nitrosodiphenylamine	mg/L	.098	.102	104		7		58 - 121	0 - 50
Nitrobenzene	mg/L	.1	.09	90		5		53 - 120	0 - 50
Pentachlorophenol	mg/L	.1	.074	74		1		25 - 158	0 - 30
Phenanthrene	mg/L	.1	.097	97		8		58 - 120	0 - 50
Phenol	mg/L	.1	.047	47		0		16 - 120	0 - 30
Pyrene	mg/L	.1	.113	113		3		54 - 120	0 - 30
Pyridine	mg/L	.1	.046	46		7		10 - 120	0 - 50
bis(2-Chloroisopropyl)ether	mg/L	.1	.095	95		1		47 - 120	0 - 50
bis(2-ethylhexyl)phthalate	mg/L	.1	.092	92		3		56 - 132	0 - 50
m,p-Cresol	mg/L	.1	.072	72		1		24 - 120	0 - 50
o-Cresol	mg/L	.1	.078	78		1		31 - 120	0 - 50

RPD : 0 out of 69 outside limits

Spike Recovery: 4 out of 138 outside limits

FORM III SV-1

3D  
SOIL SEMIVOLATILE MS/MSD RECOVERY

Lab Name: GCAL Sample ID T-15-F  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Contract: \_\_\_\_\_ Analytical Method: SW-846 8270  
 Prep Batch: 448916 Analytical Batch.: 448983

Spike HSN : 21101140502

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	MS CONCENTRATION	MS % REC	MS % REC FLAG	QC.	LIMITS
1,2-Diphenylhydrazine	mg/kg	3.98	0	3.52	89		49	- 120
2,4,5-Trichlorophenol	mg/kg	3.98	0	3.19	80		47	- 120
2,4,6-Trichlorophenol	mg/kg	3.98	0	2.96	74		46	- 120
2,4-Dichlorophenol	mg/kg	3.98	0	2.96	74		47	- 120
2,4-Dimethylphenol	mg/kg	3.98	0	3.04	77		47	- 120
2,4-Dinitrophenol	mg/kg	3.98	0	2.52	63		14	- 120
2,4-Dinitrotoluene	mg/kg	3.98	0	3.27	82		45	- 120
2,6-Dinitrotoluene	mg/kg	3.98	0	3.47	87		47	- 120
2-Chloronaphthalene	mg/kg	3.98	0	3.57	90		52	- 120
2-Chlorophenol	mg/kg	3.98	0	2.97	75		48	- 120
2-Methyl-4,6-dinitrophenol	mg/kg	3.98	0	2.94	74		29	- 120
2-Methylnaphthalene	mg/kg	3.98	0	3.21	81		43	- 120
2-Nitroaniline	mg/kg	3.98	0	3.25	82		44	- 120
2-Nitrophenol	mg/kg	3.98	0	3.28	83		49	- 120
3,3'-Dichlorobenzidine	mg/kg	3.98	0	2.85	72		35	- 120
3-Nitroaniline	mg/kg	3.98	0	2.33	59		20	- 120
4-Bromophenyl-phenylether	mg/kg	3.98	0	3.89	98		51	- 125
4-Chloro-3-methylphenol	mg/kg	3.98	0	2.83	71		46	- 120
4-Chloroaniline	mg/kg	3.98	0	1.83	46		20	- 120
4-Chlorophenyl-phenylether	mg/kg	3.94	0	3.47	88		50	- 120
4-Nitroaniline	mg/kg	4.02	0	2.89	72		32	- 120
4-Nitrophenol	mg/kg	3.98	0	2.81	71		32	- 120
Acenaphthene	mg/kg	3.98	0	3.67	92		50	- 120
Acenaphthylene	mg/kg	3.98	0	4.19	105		53	- 120
Acetophenone	mg/kg	3.98	0	3.26	82		49	- 120
Aniline	mg/kg	3.98	0	2.78	70		21	- 131
Anthracene	mg/kg	3.98	0	3.9	98		52	- 120
Atrazine (Aatrex)	mg/kg	3.98	0	5.17	130		43	- 150
Benzaldehyde	mg/kg	3.98	0	.334	8	*	25	- 127
Benzo(a)anthracene	mg/kg	3.98	0	3.74	94		48	- 120
Benzo(a)pyrene	mg/kg	3.98	0	4.04	101		44	- 120
Benzo(b)fluoranthene	mg/kg	3.98	0	3.55	89		31	- 130
Benzo(g,h,i)perylene	mg/kg	3.98	0	3.32	83		29	- 134
Benzo(k)fluoranthene	mg/kg	3.98	0	3.61	91		36	- 122
Benzoic acid	mg/kg	3.98	0	2.23	56		14	- 124
Benzyl alcohol	mg/kg	3.98	0	3.21	81		47	- 120

RPD : 0 out of 69 outside limits

Spike Recovery: 2 out of 138 outside limits

3D  
SOIL SEMIVOLATILE MS/MSD RECOVERY

Lab Name: GCAL Sample ID T-15-F  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Contract: \_\_\_\_\_ Analytical Method: SW-846 8270  
 Prep Batch: 448916 Analytical Batch.: 448983

Biphenyl	mg/kg	3.98	0	3.22	81		46 - 120
Bis(2-Chloroethoxy)methane	mg/kg	3.98	0	3.49	88		51 - 120
Bis(2-Chloroethyl)ether	mg/kg	3.98	0	3.39	85		46 - 120
Butylbenzylphthalate	mg/kg	3.98	0	3.67	92		46 - 130
Caprolactam	mg/kg	3.98	0	3.12	78		34 - 120
Carbazole	mg/kg	3.98	0	3.39	85		47 - 120
Chrysene	mg/kg	3.98	0	3.57	90		51 - 120
Di-n-butylphthalate	mg/kg	3.98	0	3.78	95		50 - 120
Di-n-octylphthalate	mg/kg	3.98	0	3.57	90		41 - 122
Dibenz(a,h)anthracene	mg/kg	3.98	0	3.32	83		27 - 129
Dibenzofuran	mg/kg	3.98	0	3.32	83		50 - 120
Diethylphthalate	mg/kg	3.98	0	3.61	91		36 - 120
Dimethyl-phthalate	mg/kg	3.98	0	3.62	91		50 - 120
Fluoranthene	mg/kg	3.98	.017	3.83	96		39 - 120
Fluorene	mg/kg	3.98	0	3.61	91		48 - 120
Hexachlorobenzene	mg/kg	3.98	0	3.45	87		48 - 120
Hexachlorocyclopentadiene	mg/kg	3.98	0	4.18	105		23 - 121
Hexachloroethane	mg/kg	3.98	0	2.94	74		40 - 120
Indeno(1,2,3-cd)pyrene	mg/kg	3.98	0	3.32	83		43 - 132
Isophorone	mg/kg	3.98	0	3.43	86		49 - 120
N-Nitroso-di-n-propylamine	mg/kg	3.98	0	3.43	86		46 - 120
N-Nitrosodimethylamine	mg/kg	3.98	0	3.18	80		34 - 126
N-Nitrosodiphenylamine	mg/kg	3.9	0	3.88	99		54 - 125
Nitrobenzene	mg/kg	3.98	0	3.34	84		45 - 120
Pentachlorophenol	mg/kg	3.98	0	2.6	65		30 - 124
Phenanthrene	mg/kg	3.98	.011	3.67	92		53 - 120
Phenol	mg/kg	3.98	0	2.95	74		42 - 120
Pyrene	mg/kg	3.98	.021	3.9	98		38 - 136
Pyridine	mg/kg	3.98	0	2.24	56		11 - 120
bis(2-Chloroisopropyl)ether	mg/kg	3.98	0	3.28	83		46 - 120
bis(2-ethylhexyl)phthalate	mg/kg	3.98	0	3.52	89		46 - 129
m,p-Cresol	mg/kg	3.98	0	2.87	72		46 - 120
o-Cresol	mg/kg	3.98	0	2.95	74		46 - 120

RPD : 0 out of 69 outside limits

Spike Recovery: 2 out of 138 outside limits

3D  
SOIL SEMIVOLATILE MS/MSD RECOVERY

Lab Name: GCAL Sample ID T-15-F  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Contract: \_\_\_\_\_ Analytical Method: SW-846 8270  
 Prep Batch: 448916 Analytical Batch.: 448983

Spike Dupe HSN : 21101140503

COMPOUND	UNITS	SPIKE ADDED	MSD CONC.	MSD % REC	REC FLAG	% RPD	RPD FLAG	QC. LIMITS REC	RPD
1,2-Diphenylhydrazine	mg/kg	3.98	3.19	80		10		49 - 120	0 - 50
2,4,5-Trichlorophenol	mg/kg	3.98	2.93	74		9		47 - 120	0 - 40
2,4,6-Trichlorophenol	mg/kg	3.98	2.63	66		12		46 - 120	0 - 40
2,4-Dichlorophenol	mg/kg	3.98	2.83	71		5		47 - 120	0 - 40
2,4-Dimethylphenol	mg/kg	3.98	2.84	71		7		47 - 120	0 - 40
2,4-Dinitrophenol	mg/kg	3.98	2.16	54		15		14 - 120	0 - 49
2,4-Dinitrotoluene	mg/kg	3.98	3.06	77		7		45 - 120	0 - 40
2,6-Dinitrotoluene	mg/kg	3.98	3.19	80		9		47 - 120	0 - 40
2-Chloronaphthalene	mg/kg	3.98	3.13	79		13		52 - 120	0 - 40
2-Chlorophenol	mg/kg	3.98	2.81	71		6		48 - 120	0 - 40
2-Methyl-4,6-dinitrophenol	mg/kg	3.98	2.45	62		18		29 - 120	0 - 40
2-Methylnaphthalene	mg/kg	3.98	3.01	76		7		43 - 120	0 - 40
2-Nitroaniline	mg/kg	3.98	2.91	73		11		44 - 120	0 - 40
2-Nitrophenol	mg/kg	3.98	3.04	77		8		49 - 120	0 - 40
3,3'-Dichlorobenzidine	mg/kg	3.98	2.53	64		12		35 - 120	0 - 40
3-Nitroaniline	mg/kg	3.98	2.08	52		11		20 - 120	0 - 46
4-Bromophenyl-phenylether	mg/kg	3.98	3.49	88		11		51 - 125	0 - 40
4-Chloro-3-methylphenol	mg/kg	3.98	2.83	71		0		46 - 120	0 - 40
4-Chloroaniline	mg/kg	3.98	1.73	44		5		20 - 120	0 - 50
4-Chlorophenyl-phenylether	mg/kg	3.94	3.15	80		10		50 - 120	0 - 40
4-Nitroaniline	mg/kg	4.02	2.66	66		8		32 - 120	0 - 40
4-Nitrophenol	mg/kg	3.98	2.61	66		7		32 - 120	0 - 40
Acenaphthene	mg/kg	3.98	3.26	82		12		50 - 120	0 - 40
Acenaphthylene	mg/kg	3.98	3.73	94		12		53 - 120	0 - 40
Acetophenone	mg/kg	3.98	3.09	78		5		49 - 120	0 - 50
Aniline	mg/kg	3.98	2.7	68		3		21 - 131	0 - 40
Anthracene	mg/kg	3.98	3.51	88		11		52 - 120	0 - 40
Atrazine (Aatrex)	mg/kg	3.98	4.68	118		10		43 - 150	0 - 50
Benzaldehyde	mg/kg	3.98	.412	10	*	21		25 - 127	0 - 50
Benzo(a)anthracene	mg/kg	3.98	3.32	83		12		48 - 120	0 - 40
Benzo(a)pyrene	mg/kg	3.98	3.44	86		16		44 - 120	0 - 40
Benzo(b)fluoranthene	mg/kg	3.98	2.82	71		23		31 - 130	0 - 40
Benzo(g,h,i)perylene	mg/kg	3.98	2.73	69		19		29 - 134	0 - 40
Benzo(k)fluoranthene	mg/kg	3.98	3.62	91		.3		36 - 122	0 - 40
Benzoic acid	mg/kg	3.98	1.87	47		17		14 - 124	0 - 40
Benzyl alcohol	mg/kg	3.98	3.12	78		3		47 - 120	0 - 40

RPD : 0 out of 69 outside limits

Spike Recovery: 2 out of 138 outside limits

3D  
SOIL SEMIVOLATILE MS/MSD RECOVERY

Lab Name: GCAL Sample ID T-15-F  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Contract: \_\_\_\_\_ Analytical Method: SW-846 8270  
 Prep Batch: 448916 Analytical Batch.: 448983

Biphenyl	mg/kg	3.98	3.1	78		4		46 - 120	0 - 50
Bis(2-Chloroethoxy)methane	mg/kg	3.98	3.3	83		6		51 - 120	0 - 40
Bis(2-Chloroethyl)ether	mg/kg	3.98	3.22	81		5		46 - 120	0 - 40
Butylbenzylphthalate	mg/kg	3.98	3.59	90		2		46 - 130	0 - 40
Caprolactam	mg/kg	3.98	3.21	81		3		34 - 120	0 - 50
Carbazole	mg/kg	3.98	2.98	75		13		47 - 120	0 - 40
Chrysene	mg/kg	3.98	3.38	85		5		51 - 120	0 - 40
Di-n-butylphthalate	mg/kg	3.98	3.4	86		11		50 - 120	0 - 40
Di-n-octylphthalate	mg/kg	3.98	3.3	83		8		41 - 122	0 - 40
Dibenz(a,h)anthracene	mg/kg	3.98	2.85	72		15		27 - 129	0 - 40
Dibenzofuran	mg/kg	3.98	2.98	75		11		50 - 120	0 - 40
Diethylphthalate	mg/kg	3.98	3.32	83		8		36 - 120	0 - 40
Dimethyl-phthalate	mg/kg	3.98	3.31	83		9		50 - 120	0 - 40
Fluoranthene	mg/kg	3.98	3.28	82		15		39 - 120	0 - 40
Fluorene	mg/kg	3.98	3.2	80		12		48 - 120	0 - 40
Hexachlorobenzene	mg/kg	3.98	3.03	76		13		48 - 120	0 - 40
Hexachlorocyclopentadiene	mg/kg	3.98	3.4	86		20		23 - 121	0 - 40
Hexachloroethane	mg/kg	3.98	2.84	71		3		40 - 120	0 - 40
Indeno(1,2,3-cd)pyrene	mg/kg	3.98	2.61	66		24		43 - 132	0 - 40
Isophorone	mg/kg	3.98	3.26	82		5		49 - 120	0 - 40
N-Nitroso-di-n-propylamine	mg/kg	3.98	3.25	82		5		46 - 120	0 - 40
N-Nitrosodimethylamine	mg/kg	3.98	2.9	73		9		34 - 126	0 - 40
N-Nitrosodiphenylamine	mg/kg	3.9	3.53	91		9		54 - 125	0 - 40
Nitrobenzene	mg/kg	3.98	3.08	77		8		45 - 120	0 - 40
Pentachlorophenol	mg/kg	3.98	2.39	60		9		30 - 124	0 - 40
Phenanthrene	mg/kg	3.98	3.32	83		10		53 - 120	0 - 40
Phenol	mg/kg	3.98	2.76	69		7		42 - 120	0 - 40
Pyrene	mg/kg	3.98	3.98	99		2		38 - 136	0 - 40
Pyridine	mg/kg	3.98	2.45	62		9		11 - 120	0 - 40
bis(2-Chloroisopropyl)ether	mg/kg	3.98	3.16	80		4		46 - 120	0 - 40
bis(2-ethylhexyl)phthalate	mg/kg	3.98	3.4	86		3		46 - 129	0 - 40
m,p-Cresol	mg/kg	3.98	2.77	70		3		46 - 120	0 - 40
o-Cresol	mg/kg	3.98	2.76	69		7		46 - 120	0 - 40

RPD: 0 out of 69 outside limits

Spike Recovery: 2 out of 138 outside limits

3D  
SOIL SEMIVOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Contract: \_\_\_\_\_

Analytical Method: SW-846 8270

Prep Batch: 448916

Analytical Batch.: 448983

**Spike HSN : 912491**

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS % REC	LCS % REC FLAG	QC.	LIMITS
1,2-Diphenylhydrazine	mg/kg	3.31	0	2.91	88		49	- 120
2,4,5-Trichlorophenol	mg/kg	3.31	0	2.66	80		47	- 120
2,4,6-Trichlorophenol	mg/kg	3.31	0	2.43	73		46	- 120
2,4-Dichlorophenol	mg/kg	3.31	0	2.53	76		47	- 120
2,4-Dimethylphenol	mg/kg	3.31	0	2.52	76		47	- 120
2,4-Dinitrophenol	mg/kg	3.31	0	2.35	71		14	- 120
2,4-Dinitrotoluene	mg/kg	3.31	0	2.71	82		45	- 120
2,6-Dinitrotoluene	mg/kg	3.31	0	2.91	88		47	- 120
2-Chloronaphthalene	mg/kg	3.31	0	2.91	88		52	- 120
2-Chlorophenol	mg/kg	3.31	0	2.52	76		48	- 120
2-Methyl-4,6-dinitrophenol	mg/kg	3.31	0	2.46	74		29	- 120
2-Methylnaphthalene	mg/kg	3.31	0	2.73	82		43	- 120
2-Nitroaniline	mg/kg	3.31	0	2.63	79		44	- 120
2-Nitrophenol	mg/kg	3.31	0	2.67	81		49	- 120
3,3'-Dichlorobenzidine	mg/kg	3.31	0	1.19	36		35	- 120
3-Nitroaniline	mg/kg	3.31	0	1.2	36		20	- 120
4-Bromophenyl-phenylether	mg/kg	3.31	0	3.33	101		51	- 125
4-Chloro-3-methylphenol	mg/kg	3.31	0	2.44	74		46	- 120
4-Chloroaniline	mg/kg	3.31	0	.764	23		20	- 120
4-Chlorophenyl-phenylether	mg/kg	3.28	0	2.98	91		50	- 120
4-Nitroaniline	mg/kg	3.34	0	2.36	71		32	- 120
4-Nitrophenol	mg/kg	3.31	0	2.39	72		32	- 120
Acenaphthene	mg/kg	3.31	0	3.03	92		50	- 120
Acenaphthylene	mg/kg	3.31	0	3.44	104		53	- 120
Acetophenone	mg/kg	3.31	0	2.8	85		49	- 120
Aniline	mg/kg	3.31	0	1.04	31		21	- 131
Anthracene	mg/kg	3.31	0	3.24	98		52	- 120
Atrazine (Aatrex)	mg/kg	3.31	0	4.23	128		43	- 150
Benzaldehyde	mg/kg	3.31	0	.282	9	*	25	- 127
Benzo(a)anthracene	mg/kg	3.31	0	3.11	94		48	- 120
Benzo(a)pyrene	mg/kg	3.31	0	3.32	100		44	- 120
Benzo(b)fluoranthene	mg/kg	3.31	0	3.08	93		31	- 130
Benzo(g,h,i)perylene	mg/kg	3.31	0	2.57	78		29	- 134
Benzo(k)fluoranthene	mg/kg	3.31	0	3.17	96		36	- 122
Benzoic acid	mg/kg	3.31	0	2.72	82		14	- 124
Benzyl alcohol	mg/kg	3.31	0	2.68	81		47	- 120

RPD : 1 out of 69 outside limits

Spike Recovery: 2 out of 138 outside limits

3D  
SOIL SEMIVOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Contract: \_\_\_\_\_

Analytical Method: SW-846 8270

Prep Batch: 448916

Analytical Batch.: 448983

Biphenyl	mg/kg	3.31	0	2.83	85	46 - 120
Bis(2-Chloroethoxy)methane	mg/kg	3.31	0	2.93	88	51 - 120
Bis(2-Chloroethyl)ether	mg/kg	3.31	0	2.83	85	46 - 120
Butylbenzylphthalate	mg/kg	3.31	0	2.89	87	46 - 130
Caprolactam	mg/kg	3.31	0	2.84	86	34 - 120
Carbazole	mg/kg	3.31	0	2.78	84	47 - 120
Chrysene	mg/kg	3.31	0	2.94	89	51 - 120
Di-n-butylphthalate	mg/kg	3.31	0	3.17	96	50 - 120
Di-n-octylphthalate	mg/kg	3.31	0	2.71	82	41 - 122
Dibenz(a,h)anthracene	mg/kg	3.31	0	2.56	77	27 - 129
Dibenzofuran	mg/kg	3.31	0	2.81	85	50 - 120
Diethylphthalate	mg/kg	3.31	0	3.06	92	36 - 120
Dimethyl-phthalate	mg/kg	3.31	0	2.97	90	50 - 120
Fluoranthene	mg/kg	3.31	0	3.07	93	39 - 120
Fluorene	mg/kg	3.31	0	3.02	91	48 - 120
Hexachlorobenzene	mg/kg	3.31	0	2.96	89	48 - 120
Hexachlorocyclopentadiene	mg/kg	3.31	0	3.56	108	23 - 121
Hexachloroethane	mg/kg	3.31	0	2.54	77	40 - 120
Indeno(1,2,3-cd)pyrene	mg/kg	3.31	0	2.32	70	43 - 132
Isophorone	mg/kg	3.31	0	2.91	88	49 - 120
N-Nitroso-di-n-propylamine	mg/kg	3.31	0	2.9	88	46 - 120
N-Nitrosodimethylamine	mg/kg	3.31	0	2.67	81	34 - 126
N-Nitrosodiphenylamine	mg/kg	3.25	0	3.23	100	54 - 125
Nitrobenzene	mg/kg	3.31	0	2.79	84	45 - 120
Pentachlorophenol	mg/kg	3.31	0	2.38	72	30 - 124
Phenanthrene	mg/kg	3.31	0	3.11	94	53 - 120
Phenol	mg/kg	3.31	0	2.37	72	42 - 120
Pyrene	mg/kg	3.31	0	3.25	98	38 - 136
Pyridine	mg/kg	3.31	0	2.02	61	11 - 120
bis(2-Chloroisopropyl)ether	mg/kg	3.31	0	2.83	85	46 - 120
bis(2-ethylhexyl)phthalate	mg/kg	3.31	0	2.81	85	46 - 129
m,p-Cresol	mg/kg	3.31	0	2.47	75	46 - 120
o-Cresol	mg/kg	3.31	0	2.46	74	46 - 120

RPD: 1 out of 69 outside limits

Spike Recovery: 2 out of 138 outside limits

FORM III SV-2

3D  
SOIL SEMIVOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Contract: \_\_\_\_\_

Analytical Method: SW-846 8270

Prep Batch: 448916

Analytical Batch.: 448983

**Spike Dupe HSN : 912492**

COMPOUND	UNITS	SPIKE ADDED	LCSD CONC.	LCSD % REC	REC FLAG	% RPD	RPD FLAG	QC. LIMITS REC	RPD
1,2-Diphenylhydrazine	mg/kg	3.3	3.04	92		4		49 - 120	0 - 50
2,4,5-Trichlorophenol	mg/kg	3.3	2.76	84		4		47 - 120	0 - 40
2,4,6-Trichlorophenol	mg/kg	3.3	2.47	75		2		46 - 120	0 - 40
2,4-Dichlorophenol	mg/kg	3.3	2.56	78		1		47 - 120	0 - 40
2,4-Dimethylphenol	mg/kg	3.3	2.48	75		2		47 - 120	0 - 40
2,4-Dinitrophenol	mg/kg	3.3	2.27	69		3		14 - 120	0 - 49
2,4-Dinitrotoluene	mg/kg	3.3	2.65	80		2		45 - 120	0 - 40
2,6-Dinitrotoluene	mg/kg	3.3	2.83	86		3		47 - 120	0 - 40
2-Chloronaphthalene	mg/kg	3.3	2.98	90		2		52 - 120	0 - 40
2-Chlorophenol	mg/kg	3.3	2.6	79		3		48 - 120	0 - 40
2-Methyl-4,6-dinitrophenol	mg/kg	3.3	2.53	77		3		29 - 120	0 - 40
2-Methylnaphthalene	mg/kg	3.3	2.76	84		1		43 - 120	0 - 40
2-Nitroaniline	mg/kg	3.3	2.67	81		2		44 - 120	0 - 40
2-Nitrophenol	mg/kg	3.3	2.75	83		3		49 - 120	0 - 40
3,3'-Dichlorobenzidine	mg/kg	3.3	1.49	45		22		35 - 120	0 - 40
3-Nitroaniline	mg/kg	3.3	1.34	41		11		20 - 120	0 - 46
4-Bromophenyl-phenylether	mg/kg	3.3	3.44	104		3		51 - 125	0 - 40
4-Chloro-3-methylphenol	mg/kg	3.3	2.43	74		.4		46 - 120	0 - 40
4-Chloroaniline	mg/kg	3.3	.982	30		25		20 - 120	0 - 50
4-Chlorophenyl-phenylether	mg/kg	3.27	2.94	90		1		50 - 120	0 - 40
4-Nitroaniline	mg/kg	3.33	2.26	68		4		32 - 120	0 - 40
4-Nitrophenol	mg/kg	3.3	2.26	68		6		32 - 120	0 - 40
Acenaphthene	mg/kg	3.3	3.03	92		0		50 - 120	0 - 40
Acenaphthylene	mg/kg	3.3	3.45	105		.3		53 - 120	0 - 40
Acetophenone	mg/kg	3.3	2.91	88		4		49 - 120	0 - 50
Aniline	mg/kg	3.3	1.98	60		62	*	21 - 131	0 - 40
Anthracene	mg/kg	3.3	3.34	101		3		52 - 120	0 - 40
Atrazine (Aatrex)	mg/kg	3.3	4.27	129		.9		43 - 150	0 - 50
Benzaldehyde	mg/kg	3.3	.28	8	*	.7		25 - 127	0 - 50
Benzo(a)anthracene	mg/kg	3.3	3.12	95		.3		48 - 120	0 - 40
Benzo(a)pyrene	mg/kg	3.3	3.35	102		.9		44 - 120	0 - 40
Benzo(b)fluoranthene	mg/kg	3.3	3.1	94		.6		31 - 130	0 - 40
Benzo(g,h,i)perylene	mg/kg	3.3	2.39	72		7		29 - 134	0 - 40
Benzo(k)fluoranthene	mg/kg	3.3	3.31	100		4		36 - 122	0 - 40
Benzoic acid	mg/kg	3.3	2.66	81		2		14 - 124	0 - 40
Benzyl alcohol	mg/kg	3.3	2.92	88		9		47 - 120	0 - 40

RPD : 1 out of 69 outside limits

Spike Recovery: 2 out of 138 outside limits

FORM III SV-2

3D  
SOIL SEMIVOLATILE LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 211011405

Contract: \_\_\_\_\_

Analytical Method: SW-846 8270

Prep Batch: 448916

Analytical Batch.: 448983

Biphenyl	mg/kg	3.3	2.78	84		2		46 - 120	0 - 50
Bis(2-Chloroethoxy)methane	mg/kg	3.3	2.96	90		1		51 - 120	0 - 40
Bis(2-Chloroethyl)ether	mg/kg	3.3	2.92	88		3		46 - 120	0 - 40
Butylbenzylphthalate	mg/kg	3.3	3.08	93		6		46 - 130	0 - 40
Caprolactam	mg/kg	3.3	2.69	82		5		34 - 120	0 - 50
Carbazole	mg/kg	3.3	2.76	84		.7		47 - 120	0 - 40
Chrysene	mg/kg	3.3	3.03	92		3		51 - 120	0 - 40
Di-n-butylphthalate	mg/kg	3.3	3.06	93		4		50 - 120	0 - 40
Di-n-octylphthalate	mg/kg	3.3	2.73	83		.7		41 - 122	0 - 40
Dibenz(a,h)anthracene	mg/kg	3.3	2.57	78		.4		27 - 129	0 - 40
Dibenzofuran	mg/kg	3.3	2.78	84		1		50 - 120	0 - 40
Diethylphthalate	mg/kg	3.3	2.9	88		5		36 - 120	0 - 40
Dimethyl-phthalate	mg/kg	3.3	2.9	88		2		50 - 120	0 - 40
Fluoranthene	mg/kg	3.3	3.03	92		1		39 - 120	0 - 40
Fluorene	mg/kg	3.3	2.9	88		4		48 - 120	0 - 40
Hexachlorobenzene	mg/kg	3.3	3.1	94		5		48 - 120	0 - 40
Hexachlorocyclopentadiene	mg/kg	3.3	3.8	115		7		23 - 121	0 - 40
Hexachloroethane	mg/kg	3.3	2.65	80		4		40 - 120	0 - 40
Indeno(1,2,3-cd)pyrene	mg/kg	3.3	2.12	64		9		43 - 132	0 - 40
Isophorone	mg/kg	3.3	2.92	88		.3		49 - 120	0 - 40
N-Nitroso-di-n-propylamine	mg/kg	3.3	3.01	91		4		46 - 120	0 - 40
N-Nitrosodimethylamine	mg/kg	3.3	2.88	87		8		34 - 126	0 - 40
N-Nitrosodiphenylamine	mg/kg	3.23	3.34	103		3		54 - 125	0 - 40
Nitrobenzene	mg/kg	3.3	2.78	84		.4		45 - 120	0 - 40
Pentachlorophenol	mg/kg	3.3	2.39	72		.4		30 - 124	0 - 40
Phenanthrene	mg/kg	3.3	3.13	95		.6		53 - 120	0 - 40
Phenol	mg/kg	3.3	2.55	77		7		42 - 120	0 - 40
Pyrene	mg/kg	3.3	3.47	105		7		38 - 136	0 - 40
Pyridine	mg/kg	3.3	2.21	67		9		11 - 120	0 - 40
bis(2-Chloroisopropyl)ether	mg/kg	3.3	2.86	87		1		46 - 120	0 - 40
bis(2-ethylhexyl)phthalate	mg/kg	3.3	2.96	90		5		46 - 129	0 - 40
m,p-Cresol	mg/kg	3.3	2.55	77		3		46 - 120	0 - 40
o-Cresol	mg/kg	3.3	2.56	78		4		46 - 120	0 - 40

RPD: 1 out of 69 outside limits

Spike Recovery: 2 out of 138 outside limits

4B  
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: GCAL Sample ID: MB912529  
Lab Code: LA024 Case No.: \_\_\_\_\_ Contract: \_\_\_\_\_  
Lab File ID: 2110114/e7973 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
GC Column: RTX-5MS-30 ID: .25 (mm) Lab Sample ID: 912529 Date Extracted: 01/14/11  
Instrument ID: MSSV4 Matrix: Water Date Analyzed: 01/14/11 Time: 1459  
Level: LOW Method: SW-846 8270  
Prep Batch: 448924 Analytical Batch: 448983

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES

	<b>SAMPLE NO.</b>	<b>LAB SAMPLE ID</b>	<b>LAB FILE ID</b>	<b>DATE ANALYZED</b>	<b>TIME ANALYZED</b>
1.	LCS912530	912530	2110114/e7974	01/14/11	1516
2.	LCSD912531	912531	2110114/e7975	01/14/11	1533
3.	EQUIPMENT BLANK	21101140514	2110114/e7976	01/14/11	1549

4B  
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: GCAL Sample ID: MB912490  
 Lab Code: LA024 Case No.: \_\_\_\_\_ Contract: \_\_\_\_\_  
 Lab File ID: 2110114/e7977 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 GC Column: RTX-5MS-30 ID: .25 (mm) Lab Sample ID: 912490 Date Extracted: 01/14/11  
 Instrument ID: MSSV4 Matrix: Solid Date Analyzed: 01/14/11 Time: 1606  
 Level: LOW Method: SW-846 8270  
 Prep Batch: 448916 Analytical Batch: 448983

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1.	LCS912491	912491	2110114/e7978	01/14/11	1623
2.	LCSD912492	912492	2110114/e7979	01/14/11	1639
3.	T-15-F	21101140501	2110114/e7980	01/14/11	1656
4.	T-15-F MS	21101140502	2110114/e7981	01/14/11	1713
5.	T-15-F MSD	21101140503	2110114/e7982	01/14/11	1729
6.	T-21-F	21101140504	2110114/e7983	01/14/11	1746
7.	NC-0-0.3	21101140505	2110114/e7984	01/14/11	1803
8.	T-2-WEST	21101140506	2110114/e7985	01/14/11	1819
9.	T-6-FLOOR	21101140507	2110114/e7986	01/14/11	1836
10.	T-6-EAST	21101140508	2110114/e7987	01/14/11	1853
11.	T-6-SOUTH	21101140509	2110114/e7988	01/14/11	1909
12.	T-6-NORTH	21101140510	2110114/e7989	01/14/11	1926
13.	BLIND DUP	21101140511	2110114/e7990	01/14/11	1943
14.	SC-W	21101140512	2110114/e7991	01/14/11	2000
15.	SC-E	21101140513	2110114/e7992	01/14/11	2016
16.	T-21-F	21101140504	2110117/e8009	01/17/11	0856

5B  
SEMIVOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE ( DFTPP )

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Lab File ID: 2110112/e7895 DFTPP Injection Date 01/12/11 Time: 0743  
 GC Column: RTX-5MS-30 ID: .25 (mm) Analytical Batch: 448984  
 Instrument ID: MSSV4

<i>m / e</i>	<i>ION ABUNDANCE CRITERIA</i>	<i>% Relative Abundance</i>
51	30.0-60.0% of mass 198	39.94 (     ) (     )
68	Less than 2% of mass 69	0 ( 0 ) ( 1 )
69	Mass 69 relative abundance	40.32 (     ) (     )
70	Less than 2.0% of mass 69	.24 ( .62 ) ( 1 )
127	40.0-60.0% of mass 198	53.66 (     ) (     )
197	Less than 1.0% of mass 198	0 (     ) (     )
198	Base Peak, 100% relative abundance	100 (     ) (     )
199	5.0-9.0% of mass 198	7.46 (     ) (     )
275	10.0-30.0% of mass 198	23.59 (     ) (     )
365	Greater than 1.0% of mass 198	2.43 (     ) (     )
441	Present, but less than mass 443	8.41 (     ) (     )
442	Greater than 40.00% of mass 198	64.27 (     ) (     )
443	17.0-23.0% of mass 442	12.48 ( 19.43 ) ( 2 )

(1)-Value is % mass 69

(2)-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	<i>SAMPLE NO.</i>	<i>LAB SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1.	STD050	1205	2110112/e7897	01/12/11	0821
2.	STD010	1204	2110112/e7898	01/12/11	0838
3.	STD080	1206	2110112/e7899	01/12/11	0854
4.	STD120	1207	2110112/e7900	01/12/11	0911
5.	STD160	1208	2110112/e7901	01/12/11	0928
6.	STD200	1209	2110112/e7902	01/12/11	0945
7.	STD002	1203	2110112/e7903	01/12/11	1002
8.	STD001	1202	2110112/e7904	01/12/11	1019
9.	STD0.2	1201	2110112/e7905	01/12/11	1037

5B  
SEMIVOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE ( DFTPP )

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Lab File ID: 2110114/e7970 DFTPP Injection Date 01/14/11 Time: 1409  
 GC Column: RTX-5MS-30 ID: .25 (mm) Analytical Batch: 448983  
 Instrument ID: MSSV4

<i>m / e</i>	<i>ION ABUNDANCE CRITERIA</i>	<i>% Relative Abundance</i>
51	30.0-60.0% of mass 198	40.07 (     ) (     )
68	Less than 2% of mass 69	0 ( 0 ) ( 1 )
69	Mass 69 relative abundance	40.58 (     ) (     )
70	Less than 2.0% of mass 69	0 ( 0 ) ( 1 )
127	40.0-60.0% of mass 198	54.64 (     ) (     )
197	Less than 1.0% of mass 198	0 (     ) (     )
198	Base Peak, 100% relative abundance	100 (     ) (     )
199	5.0-9.0% of mass 198	6.83 (     ) (     )
275	10.0-30.0% of mass 198	22.68 (     ) (     )
365	Greater than 1.0% of mass 198	2.35 (     ) (     )
441	Present, but less than mass 443	9.16 (     ) (     )
442	Greater than 40.00% of mass 198	57.27 (     ) (     )
443	17.0-23.0% of mass 442	11.72 ( 20.48 ) ( 2 )

(1)-Value is % mass 69

(2)-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	<i>SAMPLE NO.</i>	<i>LAB SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1.	STD050	1400	2110114/e7972	01/14/11	1442
2.	MB912529	912529	2110114/e7973	01/14/11	1459
3.	LCS912530	912530	2110114/e7974	01/14/11	1516
4.	LCSD912531	912531	2110114/e7975	01/14/11	1533
5.	EQUIPMENT BLANK	21101140514	2110114/e7976	01/14/11	1549
6.	MB912490	912490	2110114/e7977	01/14/11	1606
7.	LCS912491	912491	2110114/e7978	01/14/11	1623
8.	LCSD912492	912492	2110114/e7979	01/14/11	1639
9.	T-15-F	21101140501	2110114/e7980	01/14/11	1656
10.	T-15-F MS	21101140502	2110114/e7981	01/14/11	1713
11.	T-15-F MSD	21101140503	2110114/e7982	01/14/11	1729

SEMIVOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE ( DFTPP )

Lab Name: GCAL Contract: \_\_\_\_\_

Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405

Lab File ID: 2110114/e7970 DFTPP Injection Date 01/14/11 Time: 1409

GC Column: RTX-5MS-30 ID: .25 (mm) Analytical Batch: 448983

Instrument ID: MSSV4

12.	T-21-F	21101140504	2110114/e7983	01/14/11	1746
13.	NC-0-0.3	21101140505	2110114/e7984	01/14/11	1803
14.	T-2-WEST	21101140506	2110114/e7985	01/14/11	1819
15.	T-6-FLOOR	21101140507	2110114/e7986	01/14/11	1836
16.	T-6-EAST	21101140508	2110114/e7987	01/14/11	1853
17.	T-6-SOUTH	21101140509	2110114/e7988	01/14/11	1909
18.	T-6-NORTH	21101140510	2110114/e7989	01/14/11	1926
19.	BLIND DUP	21101140511	2110114/e7990	01/14/11	1943
20.	SC-W	21101140512	2110114/e7991	01/14/11	2000
21.	SC-E	21101140513	2110114/e7992	01/14/11	2016

5B  
SEMIVOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE ( DFTPP )

Lab Name: GCAL Contract: \_\_\_\_\_  
 Lab Code: LA024 Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Lab File ID: 2110117/e8007 DFTPP Injection Date 01/17/11 Time: 0822  
 GC Column: RTX-5MS-30 ID: .25 (mm) Analytical Batch: 449083  
 Instrument ID: MSSV4

<i>m / e</i>	<i>ION ABUNDANCE CRITERIA</i>	<i>% Relative Abundance</i>
51	30.0-60.0% of mass 198	36.61 ( ) ( )
68	Less than 2% of mass 69	.5 ( 1.41 ) ( 1 )
69	Mass 69 relative abundance	35.48 ( ) ( )
70	Less than 2.0% of mass 69	.25 ( .73 ) ( 1 )
127	40.0-60.0% of mass 198	51.16 ( ) ( )
197	Less than 1.0% of mass 198	.42 ( ) ( )
198	Base Peak, 100% relative abundance	100 ( ) ( )
199	5.0-9.0% of mass 198	6.61 ( ) ( )
275	10.0-30.0% of mass 198	23.34 ( ) ( )
365	Greater than 1.0% of mass 198	2.55 ( ) ( )
441	Present, but less than mass 443	9.87 ( ) ( )
442	Greater than 40.00% of mass 198	64.07 ( ) ( )
443	17.0-23.0% of mass 442	12.58 ( 19.64 ) ( 2 )

(1)-Value is % mass 69

(2)-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	<i>SAMPLE NO.</i>	<i>LAB SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1.	STD050	1400	2110117/e8008	01/17/11	0838
2.	T-21-F	21101140504	2110117/e8009	01/17/11	0856
3.	APP9050	1400	2110117/e8011	01/17/11	1403

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 27-DEC-2010 10:24  
 End Cal Date : 12-JAN-2011 10:37  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/MSSV4.i/2110112.s.b/8270CE\_04.m  
 Cal Date : 18-Jan-2011 09:22 dlb

## Calibration File Names:

Level 1: /var/chem/MSSV4.i/2110112.s.b/e7905.d  
 Level 2: /var/chem/MSSV4.i/2110111.s.b/e7868.d  
 Level 3: /var/chem/MSSV4.i/2110111.s.b/e7878.d  
 Level 4: /var/chem/MSSV4.i/2110111.s.b/e7874.d  
 Level 5: /var/chem/MSSV4.i/2110111.s.b/e7873.d  
 Level 6: /var/chem/MSSV4.i/2110111.s.b/e7875.d  
 Level 7: /var/chem/MSSV4.i/2110111.s.b/e7876.d  
 Level 8: /var/chem/MSSV4.i/2110111.s.b/e7877.d  
 Level 9: /var/chem/MSSV4.i/2110111.s.b/e7866.d

Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	or R^2
	120	160	200								
	Level 7	Level 8	Level 9								
1 n-Nitrosodimethylamine	+++++	+++++	0.67479	0.68450	0.68885	0.67501					
	0.63292	0.69510	0.61729				AVRG		0.66692		4.46926
2 Pyridine	+++++	1.34758	1.38829	1.11191	1.39431	1.27949					
	1.30643	1.21179	1.22249				AVRG		1.28278		7.58152
5 Aniline	+++++	3104	5462	29788	220945	220704					
	258128	263635	+++++				QUAD	0.08231	0.00216	0.38649	0.99202

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 27-DEC-2010 10:24  
 End Cal Date : 12-JAN-2011 10:37  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/MSSV4.i/2110112.s.b/8270CE\_04.m  
 Cal Date : 18-Jan-2011 09:22 dlb

Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
6 Phenol +	++++	1.51309	1.48317	1.60472	1.58315	1.59870					
	1.55502	1.55123	1.42493				AVRG		1.53925		4.03758
7 bis(-2-Chloroethyl)Ether	++++	++++	0.70766	0.74664	0.77113	0.75423					
	0.77302	0.77615	0.74219				AVRG		0.75300		3.19847
8 2-Chlorophenol	++++	++++	1.28889	1.23780	1.38858	1.34901					
	1.41658	1.39053	1.30831				AVRG		1.33996		4.80965
9 1,3-Dichlorobenzene	++++	++++	1.32971	1.50464	1.48238	1.46937					
	1.51442	1.51791	1.45075				AVRG		1.46702		4.45359
11 1,4-Dichlorobenzene +	++++	++++	1.47813	1.47734	1.52318	1.47923					
	1.54094	1.52639	1.45354				AVRG		1.49696		2.18627
12 Benzyl alcohol	++++	++++	++++	0.62917	0.70326	0.69906					
	0.73503	0.71370	0.66568				AVRG		0.69098		5.46621
13 1,2-Dichlorobenzene	++++	1.62477	1.28015	1.39217	1.41757	1.38021					
	1.44355	1.42900	1.35483				AVRG		1.41528		6.99251

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 27-DEC-2010 10:24  
 End Cal Date : 12-JAN-2011 10:37  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/MSSV4.i/2110112.s.b/8270CE\_04.m  
 Cal Date : 18-Jan-2011 09:22 dlb

Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
=====											
14 Bis(2-chloroisopropyl)ether	+++++	1.32813	1.41505	1.37555	1.40098	1.40131					
	1.44915	1.40837	1.32433				AVRG		1.38786		3.10813
-----											
15 2-Methylphenol	+++++	+++++	0.97509	1.08858	1.13410	1.10896					
	1.13095	1.11775	1.04570				AVRG		1.08588		5.29052
-----											
16 N-Nitroso-di-n-propylamine++	+++++	0.69647	0.67877	0.73890	0.71850	0.72846					
	0.73758	0.71297	0.66560				AVRG		0.70966		3.82076
-----											
17 3- & 4-Methylphenol	+++++	+++++	0.93904	1.12389	1.16001	1.15166					
	1.17068	1.09011	1.04398				AVRG		1.09705		7.52764
-----											
18 Hexachloroethane	+++++	0.65011	0.47813	0.52826	0.53129	0.53526					
	0.56808	0.54884	0.52434				AVRG		0.54554		9.04739
-----											
20 Nitrobenzene	+++++	0.34231	0.27691	0.31377	0.31098	0.30721					
	0.31520	0.31891	0.30434				AVRG		0.31120		5.81059
-----											
21 Isophorone	+++++	0.46667	0.46391	0.51081	0.51328	0.51877					
	0.51527	0.50604	0.47632				AVRG		0.49638		4.68438
-----											

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 27-DEC-2010 10:24  
 End Cal Date : 12-JAN-2011 10:37  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/MSSV4.i/2110112.s.b/8270CE\_04.m  
 Cal Date : 18-Jan-2011 09:22 dlb

Compound	0.2000	1	2	10	50	80	Curve	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2
	120	160	200							
	Level 7	Level 8	Level 9							
22 2-Nitrophenol +	+++++	+++++	0.15017	0.18684	0.21280	0.21392				
	0.21641	0.21798	0.20919				AVRG		0.20104	12.32340
23 2,4-Dimethyphenol	+++++	+++++	0.27870	0.33496	0.35223	0.35702				
	0.35433	0.35099	0.33522				AVRG		0.33764	8.13970
24 bis(-2-Chloroethoxy)methane	+++++	+++++	0.32661	0.34245	0.34650	0.35068				
	0.34872	0.34655	0.33353				AVRG		0.34215	2.58628
25 Benzoic Acid	+++++	+++++	+++++	0.15044	0.16159	0.17111				
	0.18602	0.14743	0.16202				AVRG		0.16310	8.66554
26 2,4-Dichlorophenol +	+++++	+++++	0.25819	0.29006	0.30568	0.31327				
	0.31528	0.31313	0.29292				AVRG		0.29836	6.83088
27 1,2,4-Trichlorobenzene	+++++	+++++	0.28192	0.32279	0.32495	0.32492				
	0.32904	0.33235	0.32125				AVRG		0.31960	5.32986
29 Naphthalene	+++++	1.02736	0.89286	0.95525	0.94387	0.95863				
	0.94529	0.96013	0.91009				AVRG		0.94918	4.19556

GCAL, Inc.

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 Cal Date : 18-Jan-2011 09:22 dlb

Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	-----	-----	-----	-----	-----	-----					
	120	160	200								
	Level 7	Level 8	Level 9								
-----											
30 4-Chloroaniline	+++++	+++++	0.35349	0.40090	0.37810	0.35187					
	0.31985	0.28762	+++++				AVRG		0.34864		11.60558
-----											
31 Hexachlorobutadiene +	0.21654	0.20434	0.15309	0.17767	0.18560	0.18604					
	0.19130	0.19151	0.18725				AVRG		0.18815		9.28188
-----											
32 4-Chloro-3-Methylphenol +	+++++	+++++	0.22653	0.25669	0.26883	0.28265					
	0.28888	0.27745	0.26230				AVRG		0.26619		7.81754
-----											
33 2-Methylnaphthalene	0.75282	0.64605	0.58900	0.64598	0.65116	0.65813					
	0.64605	0.64512	0.60899				AVRG		0.64925		6.91129
-----											
34 Hexachlorocyclopentadiene ++	+++++	0.29826	0.23002	0.29049	0.37686	0.33981					
	0.35373	0.35158	0.31297				AVRG		0.31922		14.61922
-----											
35 2,4,6-Trichlorophenol +	+++++	+++++	1909	12493	122227	165749					
	229864	266293	324035				LINR	0.05377	0.44696		0.99988
-----											
36 2,4,5-Trichlorophenol	+++++	+++++	0.35302	0.40169	0.42290	0.42120					
	0.43834	0.43991	0.41044				AVRG		0.41250		7.17910
-----											

GCAL, Inc.

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 Cal Date : 18-Jan-2011 09:22 dlb

Compound	0.2000	1	2	10	50	80	Curve	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2
	120	160	200							
	Level 7	Level 8	Level 9							
38 2-Chloronaphthalene	+++++	1.19788	1.01283	1.15357	1.16173	1.13946				
	1.16788	1.19429	1.13270				AVRG		1.14504	5.08737
39 2-Nitroaniline	+++++	+++++	+++++	0.35937	0.40825	0.41372				
	0.43652	0.43257	0.41261				AVRG		0.41051	6.71376
40 Dimethylphthalate	+++++	+++++	1.16509	1.20130	1.23863	1.23688				
	1.23851	1.26030	1.20201				AVRG		1.22039	2.65214
41 2,6-Dinitrotoluene	+++++	+++++	0.19242	0.25152	0.26962	0.27463				
	0.28782	0.28532	0.27537				AVRG		0.26238	12.59954
42 Acenaphthylene	+++++	1.64434	1.48178	1.56592	1.56283	1.52956				
	1.56569	1.61023	1.53495				AVRG		1.56191	3.18796
43 3-Nitroaniline	+++++	+++++	+++++	0.30427	0.32183	0.32299				
	0.33235	0.31127	0.30482				AVRG		0.31626	3.56213
45 Acenaphthene +	+++++	1.15493	1.00887	1.05758	1.05585	1.03922				
	1.07840	1.07828	1.02258				AVRG		1.06196	4.22970

GCAL, Inc.

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
46 2,4-Dinitrophenol ++	++++	++++	0.08652	0.10074	0.16903	0.17080					
	0.19714	0.19977	0.21809				AVRG		0.16316		31.02681<-
47 Dibenzofuran	++++	++++	1.53338	1.55043	1.52183	1.53790					
	1.57066	1.55202	1.48275				AVRG		1.53557		1.82487
48 2,4-Dinitrotoluene	++++	++++	0.31061	0.31379	0.35455	0.36181					
	0.37184	0.35157	0.34556				AVRG		0.34425		6.80302
49 4-Nitrophenol ++	++++	++++	++++	0.16393	0.16718	0.16225					
	0.17301	0.17462	0.17429				AVRG		0.16921		3.23580
50 Diethylphthalate	++++	0.96110	0.97381	1.11368	1.09530	1.11338					
	1.17079	1.13424	1.09071				AVRG		1.08163		6.91633
51 Fluorene	++++	1.17856	1.01792	1.15678	1.13521	1.15934					
	1.19545	1.16833	1.09845				AVRG		1.13875		4.99629
52 4-Chlorophenyl-phenylether	++++	0.57478	0.54346	0.56163	0.54839	0.55531					
	0.58156	0.56673	0.53458				AVRG		0.55830		2.85997

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
53 4-Nitroaniline	+++++	+++++	+++++	0.31857	0.30740	0.27698					
	0.30627	0.32406	0.29656				AVRG		0.30497		5.50817
54 4,6-Dinitro-o-cresol	+++++	+++++	698	5526	63276	86825					
	130332	151737	179347				LINR	0.13186	0.17296		0.99705
55 N-nitrosodiphenylamine (1)+	+++++	+++++	0.45923	0.52594	0.55628	0.56335					
	0.57656	0.58699	0.55801				AVRG		0.54663		7.86643
56 Azobenzene	+++++	+++++	0.66562	0.72088	0.75967	0.79619					
	0.77615	0.80018	0.74004				AVRG		0.75125		6.31054
58 4-Bromophenyl-phenylether	+++++	+++++	0.17964	0.18754	0.20333	0.21285					
	0.21756	0.22043	0.20545				AVRG		0.20383		7.49014
59 Hexachlorobenzene	0.21360	0.21749	0.20946	0.20086	0.20706	0.20768					
	0.21915	0.21824	0.20411				AVRG		0.21085		3.12189
60 Pentachlorophenol +	+++++	+++++	790	6147	66019	84775					
	128697	147511	178334				LINR	0.11438	0.16975		0.99783

GCAL, Inc.

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
62 Phenanthrene	++++	1.12947	1.04958	1.02199	1.04780	1.08261					
	1.07444	1.07808	1.06614				AVRG		1.06876		2.95851
63 Anthracene	++++	1.04511	0.91729	1.02206	1.04513	1.09079					
	1.08002	1.08598	1.05348				AVRG		1.04248		5.36051
64 Carbazole	++++	++++	0.87491	1.02118	0.98478	0.98058					
	0.99468	1.01903	0.99268				AVRG		0.98112		5.03714
65 Di-n-butylphthalate	++++	++++	0.78292	0.98236	1.09558	1.16995					
	1.17243	1.17596	1.13129				AVRG		1.07293		13.51480
M 66 Total Methylphenol	++++	++++	0.95706	1.10623	1.14705	1.13031					
	1.15081	1.10393	1.04484				AVRG		1.09146		6.34017
67 Fluoranthene +	++++	0.83651	0.85548	0.95075	0.94025	0.97780					
	0.98467	1.02638	1.00163				AVRG		0.94668		7.17485
68 Benzidine	0.15576	0.12598	0.14989	0.15815	0.09737	0.06311					
	0.05203	++++	++++				AVRG		0.11461		38.74084 <-

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 Method file : /var/chem/MSSV4.i/2110112.s.b/8270CE\_04.m  
 Cal Date : 18-Jan-2011 09:22 dlb

Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
69 Pyrene	+++++	1.07504	1.05406	1.20593	1.30230	1.34173					
	1.36052	1.30273	1.21622				AVRG		1.23232		9.48971
71 Butylbenzylphthalate	+++++	+++++	2720	19912	193224	270016					
	369335	447127	548123				LINR	0.03648	0.61405		0.99883
72 Benzo(a)anthracene	+++++	1.14780	1.06589	1.00001	1.14722	1.07573					
	1.17434	1.18936	1.11369				AVRG		1.11425		5.71029
73 3,3'-Dichlorobenzidine	+++++	+++++	1647	12760	120255	160537					
	219487	265787	329103				LINR	0.02410	0.36577		0.99928
75 Chrysene	+++++	1.37981	1.20800	1.11843	1.13703	1.20735					
	1.18854	1.20618	1.17270				AVRG		1.20225		6.59012
76 bis(2-Ethylhexyl)phthalate	+++++	1319	2668	21368	237546	337863					
	472850	577892	697389				LINR	0.05297	0.78798		0.99814
77 Di-n-octylphthalate +	+++++	+++++	+++++	22891	345642	487046					
	714374	895966	1159958				LINR	0.24132	1.31692		0.99870

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
=====											
78 Benzo(b)fluoranthene	+++++	2138	3959	26080	279436	403551					
	640955	803446	916092				QUAD	0.09873	0.81829	0.00446	0.99163
-----											
79 Benzo(k)fluoranthene	+++++	1.00962	1.07671	1.39610	1.54922	1.45940					
	1.44955	1.42894	1.50242				AVRG		1.35899		14.79681
-----											
80 Benzo(a)pyrene +	0.89265	0.98335	0.98062	0.94145	0.99936	1.09163					
	1.17377	1.15612	1.14005				AVRG		1.03989		9.84607
-----											
82 Indeno(1,2,3-cd)pyrene	165	1718	5724	31796	349680	454713					
	697721	898756	1160554				LINR	0.11267	1.26316		0.99508
-----											
83 Dibenzo(a,h)anthracene	48.00000	1280	4265	25522	270544	352276					
	521692	708860	923336				LINR	0.11054	1.10560		0.99529
-----											
84 Benzo(g,h,i)perylene	114	2413	6487	30037	311187	401133					
	621577	832347	1021938				LINR	0.09094	1.25542		0.99614
-----											
85 2-Picoline	+++++	+++++	+++++	1.39808	1.34936	1.27581					
	1.27533	1.27006	1.23750				AVRG		1.30102		4.61769
-----											

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
86 N-Nitrosomethylethylamine	+++++	+++++	+++++	0.47549	0.44718	0.38832					
	0.43642	0.43920	0.40761				AVRG		0.43237		7.08692
87 Methyl methanesulfonate	+++++	+++++	+++++	0.63301	0.59836	0.53914					
	0.47597	0.46697	+++++				AVRG		0.54269		13.49493
88 N-Nitrosodiethylamine	+++++	+++++	+++++	0.53045	0.56196	0.52549					
	0.51090	0.51946	0.52224				AVRG		0.52842		3.34620
89 Ethyl methanesulfonate	+++++	+++++	+++++	0.81295	0.85684	0.78418					
	0.77498	0.77754	0.76357				AVRG		0.79501		4.34184
90 Pentachloroethane	+++++	+++++	+++++	0.53492	0.51235	0.51232					
	0.51047	0.51764	0.51982				AVRG		0.51792		1.74943
91 Acetophenone	+++++	+++++	+++++	1.27315	1.32820	1.34328					
	1.35661	1.30680	1.22136				AVRG		1.30490		3.85937
92 O-Toluidine	+++++	+++++	+++++	52936	230827	254630					
	358532	321787	500675				QUAD	0.25294	-0.10263	0.30171	0.99762

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
93 N-Nitrosomorpholine	+++++	+++++	+++++	0.63242	0.65904	0.57176					
	0.58102	0.59330	0.56024				AVRG		0.59963		6.38053
94 N-Nitrosopiperidine	+++++	+++++	+++++	0.21448	0.20859	0.19545					
	0.20088	0.20100	0.20314				AVRG		0.20392		3.27904
95 0,0,0-Triethylphosphorothioat	+++++	+++++	+++++	0.15235	0.14745	0.14563					
	0.14709	0.15143	0.14984				AVRG		0.14897		1.78211
96 Alpha,Alpha-Dimethylphenethyl	+++++	+++++	+++++	0.51828	0.49774	0.42857					
	0.48092	0.57470	0.52512				AVRG		0.50422		9.67925
97 Hexachloropropene	+++++	+++++	+++++	0.17350	0.18056	0.19003					
	0.19611	0.19623	0.20470				AVRG		0.19019		6.01057
98 2,6-Dichlorophenol	+++++	+++++	+++++	0.29789	0.30066	0.27504					
	0.28553	0.28751	0.28750				AVRG		0.28902		3.19555
99 N-Nitrosodi-n-butylamine	+++++	+++++	+++++	0.18369	0.18726	0.17351					
	0.17829	0.17847	0.17995				AVRG		0.18019		2.64365

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Compound	0.2000	1	2	10	50	80	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
100 p-Phenylenediamine	+++++	+++++	+++++	+++++	0.01474	0.01093					
	0.01262	0.01723	0.02006				AVRG		0.01512		24.04371
101 Isosafrole	+++++	+++++	+++++	0.13018	0.12964	0.12129					
	0.12304	0.12596	0.12299				AVRG		0.12552		2.96745
102 1,2,4,5-Tetrachlorobenzene	+++++	0.57855	0.58127	0.66269	0.59615	0.63018					
	0.60123	0.61702	0.61482				AVRG		0.61024		4.52546
103 Safrole	+++++	+++++	+++++	1.05282	0.99765	1.00032					
	0.96573	0.98667	0.97292				AVRG		0.99602		3.10612
104 1,4-Naphthoquinone	+++++	0.24974	0.34601	0.40773	0.27466	0.14703					
	0.06141	+++++	+++++				AVRG		0.24776		51.32166
105 m-Dinitrobenzene	+++++	+++++	0.14068	0.17277	0.19561	0.18330					
	0.18848	0.21026	0.19933				AVRG		0.18435		12.29412
106 Pentachlorobenzene	+++++	+++++	+++++	0.48786	0.47417	0.45663					
	0.45397	0.46938	0.46311				AVRG		0.46752		2.67671

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 Method file : /var/chem/MSSV4.i/2110112.s.b/8270CE\_04.m  
 Cal Date : 18-Jan-2011 09:22 dlb

Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
107 2-Naphthylamine	+++++	+++++	9837	53016	281008	265775					
	396141	401398	655719				QUAD	-0.00166	0.82148	0.24972	0.99746
108 2,3,4,6-Tetrachlorophenol	+++++	+++++	0.17131	0.20620	0.24391	0.23546					
	0.24133	0.26795	0.26782				AVRG		0.23343		14.78954
109 1-Naphthylamine	+++++	+++++	12257	57717	280086	262177					
	373829	367281	+++++				QUAD	0.03131	0.51044	0.45433	0.99638
110 Thionazin	+++++	+++++	+++++	0.17973	0.19686	0.16620					
	0.16980	0.16842	0.15793				AVRG		0.17316		7.83084
111 5-Nitro-o-toluidine	+++++	+++++	+++++	0.31309	0.33335	0.29429					
	0.29098	0.30838	0.30634				AVRG		0.30774		4.92440
112 Tetraethyldithiopyrophosphate	+++++	+++++	+++++	0.10451	0.12198	0.11335					
	0.11869	0.12466	0.13141				AVRG		0.11910		7.84866
113 Diallate	+++++	+++++	+++++	0.24245	0.21539	0.21500					
	0.20847	0.21054	0.20239				AVRG		0.21571		6.46384

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 27-DEC-2010 10:24  
 End Cal Date : 12-JAN-2011 10:37  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/MSSV4.i/2110112.s.b/8270CE\_04.m  
 Cal Date : 18-Jan-2011 09:22 dlb

Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
114 Phorate	++++	++++	++++	0.39234	0.37638	0.36721					
	0.33754	0.35611	0.31359				AVRG		0.35720		7.91052
115 sym-Trinitrobenzene	++++	++++	++++	3310	26818	28934					
	56712	67177	119262				QUAD	0.13053	14.47101	-6.02436	0.99715<-
116 Phenacetin	++++	++++	++++	0.26918	0.29711	0.28409					
	0.30915	0.34379	0.29996				AVRG		0.30055		8.43080
117 Dimethoate	++++	++++	++++	0.21119	0.21790	0.19615					
	0.20505	0.22232	0.19117				AVRG		0.20730		5.87936
118 Pentachloronitrobenzene	++++	++++	++++	0.08345	0.08991	0.08310					
	0.09113	0.09512	0.08877				AVRG		0.08858		5.23137
119 4-Aminobiphenyl	++++	4616	10976	51228	248691	239016					
	318298	++++	++++				QUAD	0.06165	0.30459	1.62073	0.99556
120 Pronamide	++++	++++	++++	0.28436	0.31383	0.29521					
	0.29261	0.32292	0.30244				AVRG		0.30189		4.73814

GCAL, Inc.

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
121 Dinoseb	+++++	+++++	993	6227	63686	71568					
	128200	162201	269094				QUAD	0.09085	6.21847	-1.02629	0.99493
122 Disulfoton	+++++	+++++	+++++	0.33398	0.30911	0.26953					
	0.27531	0.28236	0.25033				AVRG		0.28677		10.46602
123 Methyl parathion	+++++	+++++	+++++	0.17814	0.21177	0.19528					
	0.21250	0.21999	0.19830				AVRG		0.20266		7.49767
124 4-Nitroquinoline-1-oxide	+++++	+++++	320	2062	23795	25437					
	51061	58658	+++++				QUAD	0.07874	17.94258	-14.13053	0.99782 <-
125 Parathion	+++++	+++++	+++++	0.10348	0.12355	0.11660					
	0.12400	0.13587	0.12602				AVRG		0.12159		8.90693
126 Metapyrilene	+++++	+++++	+++++	0.18295	0.20900	0.19316					
	0.22505	0.24509	0.23339				AVRG		0.21477		11.18237
127 Isodrin	+++++	+++++	+++++	0.12763	0.12882	0.12329					
	0.12187	0.12861	0.12246				AVRG		0.12545		2.58374

GCAL, Inc.

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
128 Aramite	+++++	+++++	+++++	1527	13703	14046					
	27533	34597	60861				LINR	0.18343	0.05432		0.99522 <-
129 p-(Dimethylamino)azobenzene	+++++	+++++	+++++	0.33159	0.38700	0.35837					
	0.35805	0.35815	0.35171				AVRG		0.35748		4.96808
130 Chlorobenzilate	+++++	+++++	+++++	0.28345	0.33187	0.31142					
	0.32474	0.33465	0.33545				AVRG		0.32026		6.28453
131 Famphur	+++++	999	3416	15437	73480	82085					
	117836	+++++	+++++				QUAD	0.04468	1.61681	4.75261	0.99171
132 3,3'-Dimethyl benzidine	+++++	0.19122	0.31838	0.46433	0.36210	0.22532					
	0.16309	+++++	+++++				AVRG		0.28741		40.09647 <-
133 2-Acetylaminofluorene	+++++	+++++	2558	11068	104884	135973					
	271829	366299	+++++				QUAD	0.06459	2.54842	-0.34838	0.99972
134 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	0.44922	0.62171	0.58855					
	0.63312	0.62986	0.60366				AVRG		0.58769		11.89420

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
135 Hexachlorophene	+++++	+++++	+++++	0.00344	0.01076	0.01860					
	0.03299	0.04550	0.05312				AVRG		0.02740		72.04568 <-
136 3-Methyl cholanthrene	+++++	+++++	2460	11157	99298	135365					
	278258	357867	624745				LINR	0.11863	0.58376		0.99766
137 Acrylamide	+++++	+++++	0.47821	0.52368	0.46958	0.49645					
	0.44009	0.45843	+++++				AVRG		0.47774		6.15070
138 N-Nitrosopyrrolidine	+++++	+++++	0.42567	0.48665	0.46282	0.46732					
	0.49190	0.45646	+++++				AVRG		0.46514		5.10782
139 Phthalic Acid & Anhydride	+++++	+++++	+++++	0.19975	0.14946	0.14382					
	0.15223	0.13533	+++++				AVRG		0.15612		16.16273
140 1,4-Dinitrobenzene	+++++	+++++	1214	19262	39202	67723					
	81753	116551	+++++				LINR	0.04125	0.18327		0.99971
141 Kepone	+++++	+++++	+++++	0.04059	0.04588	0.06681					
	0.06442	0.06146	+++++				AVRG		0.05583		21.14341 <-

GCAL, Inc.

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
142 4,4Methylenebis2chloroaniline	+++++	+++++	+++++	12317	26519	58887					
	76721	104045	+++++				LINR	0.23981	0.15589		0.99573
143 Tris2,3Dibromopropylphosphate	+++++	+++++	+++++	2686	6396	15313					
	21183	28204	+++++				LINR	0.29624	0.05412		0.99677 <-
144 Maleic Anhydride	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00
145 1-Methylnapthalene	+++++	0.59188	0.57957	0.60907	0.58955	0.60458					
	0.60221	0.58679	0.56014				AVRG		0.59047		2.66875
M 146 Total Methylnapthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
147 N-methyldiethanolamine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
148 A-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
149 3/4-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
151 2,3-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
152 2,5-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
153 3,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
154 Dimethyl Benzyl Alcohol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
155 Benzaldehyde	+++++	207	462	9787	58777	63097					
	70376	+++++	+++++				QUAD	0.04642	0.91391	3.61156	0.99789
156 Caprolactam	+++++	+++++	0.05427	0.06930	0.07198	0.07629					
	0.07964	0.07262	0.06777				AVRG		0.07027		11.55526

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
157 Biphenyl	+++++	0.78161	0.68175	0.73036	0.71133	0.72719					
	0.73035	0.69514	0.65892				AVRG		0.71458		5.21331
158 Atrazine	+++++	0.10910	0.12217	0.14832	0.13242	0.12384					
	0.11884	0.10599	0.08967				AVRG		0.11879		14.92382
159 Dicyclopentadiene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
169 Benzenethiol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
170 Indene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
171 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
172 Methyl Chrysene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	-----	-----	-----	-----	-----	-----					
	120	160	200								
	Level 7	Level 8	Level 9								
=====											
173 Dibenz (a,h)acridine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				QUAD	0.000e+00	0.000e+00	0.000e+00	0.000e+00 <-
-----											
174 1,4-Dioxane	303	1385	1616	8928	75415	86810					
	121026	152717	184284				LINR	-0.01747	0.44082		0.99960
-----											
175 2,4and/or2,6-Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
-----											
185 2,3and/or3,4 Diaminotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
-----											
176 4-t-Butyl Phenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
-----											
177 1,2,3,4-Tetrachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
-----											
178 2-Phenyl Phenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
-----											

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Compound	0.2000	1	2	10	50	80	Curve	b	Coefficients		%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
179 Ronnel	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00 <-
180 Hexabromobenzene	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00 <-
181 Tolylene 2,6-Diisocyanate	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00 <-
182 Tolylene 2,4-Diisocyanate	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00 <-
183 Tolylene 2,5-diisocyanate	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00 <-
M 184 Tolylene Diisocyanate	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00 <-
186 Benzothiazole	++++	++++	++++	++++	++++	++++	AVRG		0.000e+00		0.000e+00 <-

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
187 2-3H Benzothiazolone	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
188 2-3H Benzothiazolethione	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
189 2-tet-Butyl-4-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
190 Methylbenzothiazole	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
191 2,3,4-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				LINR	0.000e+00	0.000e+00		0.000e+00 <-
192 2,3,5,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
193 3,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-

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Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	
	120	160	200								
	Level 7	Level 8	Level 9								
=====											
194 Diphenyl Ether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
-----											
195 2,5/2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
-----											
196 2,3,4,5-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
-----											
197 Dimethylformamide	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
-----											
198 4,4-Isopropylidene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				LINR	0.000e+00	0.000e+00		0.000e+00 <-
-----											
199 1,2,3,4-tetrahydronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
-----											
200 Decane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
-----											

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Compound	0.2000 Level 1	1 Level 2	2 Level 3	10 Level 4	50 Level 5	80 Level 6	Curve	b	Coefficients m1	m2	%RSD or R^2
	120 Level 7	160 Level 8	200 Level 9								
201 Octadecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
202 1,2-Dinitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
203 1-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++				AVRG		0.000e+00		0.000e+00 <-
\$ 3 2-Fluorophenol	+++++	+++++	+++++	1.21111	1.27164	1.24307					
	1.26200	1.27179	1.20541				AVRG		1.24417		2.39270
\$ 4 Phenol-d5	+++++	+++++	+++++	1.33731	1.39565	1.34484					
	1.37844	1.36220	1.26333				AVRG		1.34696		3.43198
\$ 19 Nitrobenzene-d5	+++++	+++++	+++++	0.31834	0.33009	0.32383					
	0.33018	0.33266	0.32382				AVRG		0.32649		1.65092
\$ 37 2-Fluorobiphenyl	+++++	+++++	+++++	1.29729	1.32853	1.28052					
	1.32318	1.34952	1.29568				AVRG		1.31245		1.95090

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 27-DEC-2010 10:24  
 End Cal Date : 12-JAN-2011 10:37  
 Quant Method : ISTD  
 Target Version : 3.50  
 Integrator : HP RTE  
 Method file : /var/chem/MSSV4.i/2110112.s.b/8270CE\_04.m  
 Cal Date : 18-Jan-2011 09:22 dlb

Compound	0.2000	1	2	10	50	80	Curve	Coefficients			%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		b	m1	m2	or R^2
	120	160	200								
	Level 7	Level 8	Level 9								
=====											
\$ 57 2,4,6-Tribromophenol	+++++	+++++	+++++	0.12937	0.12812	0.13079					
	0.14256	0.13608	0.13672				AVRG		0.13394		4.10563
-----											
\$ 70 Terphenyl-d14	+++++	+++++	+++++	0.70193	0.80660	0.82578					
	0.83953	0.81433	0.76646				AVRG		0.79244		6.40386
-----											

GCAL, Inc.

## INITIAL CALIBRATION DATA

Start Cal Date : 27-DEC-2010 10:24  
End Cal Date : 12-JAN-2011 10:37  
Quant Method : ISTD  
Target Version : 3.50  
Integrator : HP RTE  
Method file : /var/chem/MSSV4.i/2110112.s.b/8270CE\_04.m  
Cal Date : 18-Jan-2011 09:22 dlb

## Average %RSD Results.

Calculated Average %RSD = 8.19064  
Maximun Average %RSD = 15.00000  
\* Passed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

GCAL, Inc.

RECOVERY REPORT

Client Name: 42-7-10	Client SDG: 2110112.s
Sample Matrix: LIQUID	Fraction: SV
Lab Smp Id: 1600	Client Smp ID: STDICV
Level: LOW	Operator: KCB
Data Type: MS DATA	SampleType: LCS
SpikeList File: icv70.spk	Quant Type: ISTD
Sublist File: SA8270.sub	
Method File: /var/chem/MSSV4.i/2110112.s.b/8270CE_04.m	
Misc Info: STDICV*MSSV~7006~*	

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 n-Nitrosodimethylamine	50.0	48.1	96.23	70-130
2 Pyridine	50.0	43.8	87.62	70-130
6 Phenol +	50.0	51.2	102.35	70-130
5 Aniline	50.0	46.5	93.00	70-130
7 bis(-2-Chloroethyl)Ether	50.0	48.2	96.50	70-130
8 2-Chlorophenol	50.0	50.1	100.21	70-130
9 1,3-Dichlorobenzene	50.0	49.3	98.65	70-130
11 1,4-Dichlorobenzene +	50.0	49.1	98.13	70-130
13 1,2-Dichlorobenzene	50.0	48.2	96.41	70-130
12 Benzyl alcohol	50.0	49.0	98.02	70-130
15 2-Methylphenol	50.0	51.0	102.02	70-130
14 Bis(2-chloroisopropyl)ether	50.0	49.8	99.54	70-130
17 3- & 4-Methylphenol	50.0	52.2	104.39	70-130
16 N-Nitroso-di-n-propylamine++	50.0	51.7	103.42	70-130
18 Hexachloroethane	50.0	47.6	95.24	70-130
20 Nitrobenzene	50.0	50.1	100.16	70-130
21 Isophorone	50.0	51.7	103.31	70-130
22 2-Nitrophenol +	50.0	50.3	100.63	70-130
23 2,4-Dimethyphenol	50.0	52.1	104.12	70-130
25 Benzoic Acid	50.0	53.4	106.87	70-130
24 bis(-2-Chloroethoxy)methane	50.0	50.1	100.23	70-130
26 2,4-Dichlorophenol +	50.0	50.0	99.99	70-130
27 1,2,4-Trichlorobenzene	50.0	49.5	98.96	70-130
29 Naphthalene	50.0	49.6	99.18	70-130
30 4-Chloroaniline	50.0	55.0	110.01	70-130
31 Hexachlorobutadiene +	50.0	48.4	96.71	70-130
32 4-Chloro-3-Methylphenol +	50.0	52.1	104.12	70-130
33 2-Methylnaphthalene	50.0	49.7	99.40	70-130
34 Hexachlorocyclopentadiene ++	50.0	52.6	105.18	70-130
35 2,4,6-Trichlorophenol +	50.0	47.6	95.14	70-130
36 2,4,5-Trichlorophenol	50.0	51.6	103.22	70-130
38 2-Chloronaphthalene	50.0	50.4	100.88	70-130
39 2-Nitroaniline	50.0	51.2	102.39	70-130

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
40 Dimethylphthalate	50.0	51.2	102.46	70-130
41 2,6-Dinitrotoluene	50.0	52.9	105.77	70-130
42 Acenaphthylene	50.0	49.8	99.63	70-130
43 3-Nitroaniline	50.0	55.6	111.26	70-130
45 Acenaphthene +	50.0	50.0	99.92	70-130
46 2,4-Dinitrophenol ++	50.0	57.0	113.92	70-130
49 4-Nitrophenol ++	50.0	53.0	105.93	70-130
48 2,4-Dinitrotoluene	50.0	54.6	109.18	70-130
47 Dibenzofuran	50.0	50.5	100.93	70-130
50 Diethylphthalate	50.0	54.6	109.22	70-130
51 Fluorene	50.0	52.0	104.07	70-130
52 4-Chlorophenyl-phenylether	50.0	50.6	101.27	70-130
55 N-nitrosodiphenylamine (1)+	50.0	50.2	100.35	70-130
53 4-Nitroaniline	50.0	54.9	109.75	70-130
54 4,6-Dinitro-o-cresol	50.0	49.9	99.74	70-130
56 Azobenzene	50.0	50.7	101.44	70-130
58 4-Bromophenyl-phenylether	50.0	49.8	99.57	70-130
59 Hexachlorobenzene	50.0	48.9	97.85	70-130
60 Pentachlorophenol +	50.0	50.5	100.95	70-130
62 Phenanthrene	50.0	51.0	102.08	70-130
63 Anthracene	50.0	52.5	105.08	70-130
65 Di-n-butylphthalate	50.0	54.7	109.32	70-130
67 Fluoranthene +	50.0	54.6	109.25	70-130
69 Pyrene	50.0	49.7	99.41	70-130
71 Butylbenzylphthalate	50.0	45.8	91.51	70-130
73 3,3'-Dichlorobenzidine	50.0	50.2	100.47	70-130
72 Benzo(a)anthracene	50.0	47.6	95.17	70-130
75 Chrysene	50.0	50.1	100.15	70-130
76 bis(2-Ethylhexyl)phthalate	50.0	45.1	90.20	70-130
77 Di-n-octylphthalate +	50.0	46.4	92.85	70-130
78 Benzo(b)fluoranthene	50.0	44.5	89.06	70-130
79 Benzo(k)fluoranthene	50.0	52.1	104.30	70-130
80 Benzo(a)pyrene +	50.0	51.6	103.23	70-130
82 Indeno(1,2,3-cd)pyrene	50.0	44.9	89.78	70-130
83 Dibenzo(a,h)anthracene	50.0	43.8	87.58	70-130
84 Benzo(g,h,i)perylene	50.0	45.5	90.94	70-130
155 Benzaldehyde	50.0	52.7	105.44	70-130
156 Caprolactam	50.0	55.9	111.87	70-130
157 Biphenyl	50.0	50.5	100.92	70-130
158 Atrazine	50.0	58.7	117.39	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 3 2-Fluorophenol	100	48.9	48.86	10-120

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSSV4.i Injection Date: 14-JAN-2011 14:42  
Lab File ID: e7972.d Init. Cal. Date(s): 27-DEC-2010 12-JAN-2011  
Analysis Type: WATER Init. Cal. Times: 10:24 10:37  
Lab Sample ID: 1400 Quant Type: ISTD  
Method: /var/chem/MSSV4.i/2110114.s.b/8270CE\_04.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
2 Pyridine	1.28278	1.31308	1.31308	0.050	2.36202	30.00000	Averaged
1 n-Nitrosodimethylamine	0.66692	0.67946	0.67946	0.050	1.87909	30.00000	Averaged
\$ 3 2-Fluorophenol	1.24417	1.24368	1.24368	0.050	-0.03921	30.00000	Averaged
\$ 4 Phenol-d5	1.34696	1.31389	1.31389	0.050	-2.45556	30.00000	Averaged
5 Aniline	42.21521	50.00000	1.26716	0.050	-15.56958	30.00000	Quadratic
6 Phenol +	1.53925	1.53319	1.53319	0.050	-0.39389	20.00000	Averaged
7 bis(-2-Chloroethyl)Ether	0.75300	0.74926	0.74926	0.050	-0.49690	30.00000	Averaged
8 2-Chlorophenol	1.33996	1.33870	1.33870	0.050	-0.09354	30.00000	Averaged
9 1,3-Dichlorobenzene	1.46702	1.46662	1.46662	0.050	-0.02788	30.00000	Averaged
11 1,4-Dichlorobenzene +	1.49696	1.50940	1.50940	0.050	0.83095	20.00000	Averaged
12 Benzyl alcohol	0.69098	0.65303	0.65303	0.050	-5.49227	30.00000	Averaged
13 1,2-Dichlorobenzene	1.41528	1.38279	1.38279	0.050	-2.29562	30.00000	Averaged
15 2-Methylphenol	1.08588	1.07753	1.07753	0.050	-0.76874	30.00000	Averaged
14 Bis(2-chloroisopropyl)ether	1.38786	1.35599	1.35599	0.050	-2.29629	30.00000	Averaged
17 3- & 4-Methylphenol	1.09705	1.08427	1.08427	0.050	-1.16480	30.00000	Averaged
16 N-Nitroso-di-n-propylamine+	0.70966	0.66833	0.66833	0.050	-5.82331	30.00000	Averaged
18 Hexachloroethane	0.54554	0.53946	0.53946	0.050	-1.11445	30.00000	Averaged
\$ 19 Nitrobenzene-d5	0.32649	0.32025	0.32025	0.050	-1.91013	30.00000	Averaged
20 Nitrobenzene	0.31120	0.30578	0.30578	0.050	-1.74375	30.00000	Averaged
21 Isophorone	0.49638	0.47889	0.47889	0.050	-3.52475	30.00000	Averaged
22 2-Nitrophenol +	0.20104	0.19911	0.19911	0.050	-0.96220	20.00000	Averaged
23 2,4-Dimethylphenol	0.33764	0.34177	0.34177	0.050	1.22415	30.00000	Averaged
24 bis(-2-Chloroethoxy)methane	0.34215	0.33177	0.33177	0.050	-3.03349	30.00000	Averaged
25 Benzoic Acid	0.16310	0.12853	0.12853	0.050	-21.19961	30.00000	Averaged
26 2,4-Dichlorophenol +	0.29836	0.29488	0.29488	0.050	-1.16701	20.00000	Averaged
27 1,2,4-Trichlorobenzene	0.31960	0.32434	0.32434	0.050	1.48143	30.00000	Averaged
29 Naphthalene	0.94918	0.94203	0.94203	0.050	-0.75408	30.00000	Averaged
30 4-Chloroaniline	0.34864	0.34439	0.34439	0.050	-1.21966	30.00000	Averaged
31 Hexachlorobutadiene +	0.18815	0.18935	0.18935	0.050	0.63943	20.00000	Averaged
32 4-Chloro-3-Methylphenol +	0.26619	0.24202	0.24202	0.050	-9.07804	20.00000	Averaged
33 2-Methylnaphthalene	0.64925	0.61121	0.61121	0.050	-5.85909	30.00000	Averaged
145 1-Methylnapthalene	0.59047	0.55555	0.55555	0.050	-5.91479	30.00000	Averaged
34 Hexachlorocyclopentadiene +	0.31922	0.39493	0.39493	0.050	23.71891	30.00000	Averaged
35 2,4,6-Trichlorophenol +	49.13391	50.00000	0.41999	0.050	-1.73218	20.00000	Linear
36 2,4,5-Trichlorophenol	0.41250	0.42581	0.42581	0.050	3.22640	30.00000	Averaged
\$ 37 2-Fluorobiphenyl	1.31245	1.36347	1.36347	0.050	3.88741	30.00000	Averaged

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSSV4.i Injection Date: 14-JAN-2011 14:42  
Lab File ID: e7972.d Init. Cal. Date(s): 27-DEC-2010 12-JAN-2011  
Analysis Type: WATER Init. Cal. Times: 10:24 10:37  
Lab Sample ID: 1400 Quant Type: ISTD  
Method: /var/chem/MSSV4.i/2110114.s.b/8270CE\_04.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
138 2-Chloronaphthalene	1.14504	1.19007	1.19007	0.050	3.93221	30.00000	Averaged
139 2-Nitroaniline	0.41051	0.39737	0.39737	0.050	-3.20076	30.00000	Averaged
140 Dimethylphthalate	1.22039	1.20518	1.20518	0.050	-1.24637	30.00000	Averaged
141 2,6-Dinitrotoluene	0.26238	0.25942	0.25942	0.050	-1.13134	30.00000	Averaged
142 Acenaphthylene	1.56191	1.55665	1.55665	0.050	-0.33682	30.00000	Averaged
143 3-Nitroaniline	0.31626	0.30520	0.30520	0.050	-3.49599	30.00000	Averaged
145 Acenaphthene +	1.06196	1.04291	1.04291	0.050	-1.79459	20.00000	Averaged
146 2,4-Dinitrophenol ++	46.07757	50.00000	0.15430	0.050	-7.84485	30.00000	Quadratic
149 4-Nitrophenol ++	0.16921	0.15400	0.15400	0.050	-8.98792	30.00000	Averaged
147 Dibenzofuran	1.53557	1.54681	1.54681	0.050	0.73223	30.00000	Averaged
148 2,4-Dinitrotoluene	0.34425	0.34107	0.34107	0.050	-0.92206	30.00000	Averaged
150 Diethylphthalate	1.08163	1.07156	1.07156	0.050	-0.93052	30.00000	Averaged
152 4-Chlorophenyl-phenylether	0.55830	0.53653	0.53653	0.050	-3.90055	30.00000	Averaged
151 Fluorene	1.13875	1.14513	1.14513	0.050	0.56038	30.00000	Averaged
153 4-Nitroaniline	0.30497	0.30051	0.30051	0.050	-1.46214	30.00000	Averaged
154 4,6-Dinitro-o-cresol	46.81279	50.00000	0.14369	0.050	-6.37443	30.00000	Linear
155 N-nitrosodiphenylamine (1)+	0.54663	0.54760	0.54760	0.050	0.17764	20.00000	Averaged
156 Azobenzene	0.75125	0.78301	0.78301	0.050	4.22804	30.00000	Averaged
157 2,4,6-Tribromophenol	0.13394	0.12812	0.12812	0.050	-4.34502	30.00000	Averaged
158 4-Bromophenyl-phenylether	0.20383	0.20553	0.20553	0.050	0.83330	30.00000	Averaged
159 Hexachlorobenzene	0.21085	0.20425	0.20425	0.050	-3.13051	30.00000	Averaged
160 Pentachlorophenol +	45.91550	50.00000	0.14035	0.050	-8.16900	20.00000	Linear
162 Phenanthrene	1.06876	1.02833	1.02833	0.050	-3.78294	30.00000	Averaged
163 Anthracene	1.04248	1.05600	1.05600	0.050	1.29659	30.00000	Averaged
164 Carbazole	0.98112	0.99891	0.99891	0.050	1.81359	30.00000	Averaged
165 Di-n-butylphthalate	1.07293	1.07844	1.07844	0.050	0.51396	30.00000	Averaged
167 Fluoranthene +	0.94668	0.98745	0.98745	0.050	4.30593	20.00000	Averaged
168 Benzidine	0.11461	0.08736	0.08736	0.050	-23.77676	30.00000	Averaged
169 Pyrene	1.23232	1.43075	1.43075	0.050	16.10287	30.00000	Averaged
170 Terphenyl-d14	0.79244	0.87054	0.87054	0.050	9.85603	30.00000	Averaged
171 Butylbenzylphthalate	49.31672	50.00000	0.58774	0.050	-1.36656	30.00000	Linear
173 3,3'-Dichlorobenzidine	48.81923	50.00000	0.35008	0.050	-2.36154	30.00000	Linear
172 Benzo(a)anthracene	1.11425	1.05674	1.05674	0.050	-5.16178	30.00000	Averaged
176 bis(2-Ethylhexyl)phthalate	44.93608	50.00000	0.67478	0.050	-10.12784	30.00000	Linear
175 Chrysene	1.20225	1.23900	1.23900	0.050	3.05605	30.00000	Averaged

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSSV4.i Injection Date: 14-JAN-2011 14:42  
 Lab File ID: e7972.d Init. Cal. Date(s): 27-DEC-2010 12-JAN-2011  
 Analysis Type: WATER Init. Cal. Times: 10:24 10:37  
 Lab Sample ID: 1400 Quant Type: ISTD  
 Method: /var/chem/MSSV4.i/2110114.s.b/8270CE\_04.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
77 Di-n-octylphthalate +	42.88036	50.00000	0.87516	0.050	-14.23928	20.00000	Linear
78 Benzo(b)fluoranthene	44.32577	50.00000	0.98031	0.050	-11.34847	30.00000	Quadratic
79 Benzo(k)fluoranthene	1.35899	1.47756	1.47756	0.050	8.72497	30.00000	Averaged
80 Benzo(a)pyrene +	1.03989	1.05500	1.05500	0.050	1.45288	20.00000	Averaged
82 Indeno(1,2,3-cd)pyrene	40.88510	50.00000	0.91903	0.050	-18.22980	30.00000	Linear
83 Dibenzo(a,h)anthracene	43.84797	50.00000	0.87180	0.050	-12.30406	30.00000	Linear
84 Benzo(g,h,i)perylene	46.33714	50.00000	1.07212	0.050	-7.32572	30.00000	Linear
M 66 Total Methylphenol	1.09146	1.08090	1.08090	0.050	-0.96778	30.00000	Averaged
91 Acetophenone	1.30490	1.26843	1.26843	0.050	-2.79451	30.00000	Averaged
155 Benzaldehyde	51.78637	50.00000	0.37987	0.050	3.57275	30.00000	Quadratic
156 Caprolactam	0.07027	0.06003	0.06003	0.050	-14.57457	30.00000	Averaged
157 Biphenyl	0.71458	0.66136	0.66136	0.050	-7.44768	30.00000	Averaged
158 Atrazine	0.11879	0.13083	0.13083	0.050	10.12892	30.00000	Averaged
174 1,4-Dioxane	51.22342	50.00000	0.45777	0.050	2.44685	30.00000	Linear

Average %D / Drift Results.  
 -----  
 Calculated Average %D/Drift = 4.73174  
 Maximun Average %D/Drift = 30.00000  
 \* Passed Average %D/Drift Test.

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSSV4.i Injection Date: 17-JAN-2011 08:38  
 Lab File ID: e8008.d Init. Cal. Date(s): 27-DEC-2010 12-JAN-2011  
 Analysis Type: WATER Init. Cal. Times: 10:24 10:37  
 Lab Sample ID: 1400 Quant Type: ISTD  
 Method: /var/chem/MSSV4.i/2110117.s.b/8270CE\_04.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
2 Pyridine	1.28278	1.44319	1.44319	0.050	12.50427	30.00000	Averaged
1 n-Nitrosodimethylamine	0.66692	0.67383	0.67383	0.050	1.03516	30.00000	Averaged
3 2-Fluorophenol	1.24417	1.27244	1.27244	0.050	2.27246	30.00000	Averaged
4 Phenol-d5	1.34696	1.34552	1.34552	0.050	-0.10666	30.00000	Averaged
5 Aniline	41.51068	50.00000	1.25562	0.050	-16.97863	30.00000	Quadratic
6 Phenol +	1.53925	1.56060	1.56060	0.050	1.38687	20.00000	Averaged
7 bis(-2-Chloroethyl)Ether	0.75300	0.77644	0.77644	0.050	3.11301	30.00000	Averaged
8 2-Chlorophenol	1.33996	1.38542	1.38542	0.050	3.39289	30.00000	Averaged
9 1,3-Dichlorobenzene	1.46702	1.50131	1.50131	0.050	2.33713	30.00000	Averaged
11 1,4-Dichlorobenzene +	1.49696	1.51178	1.51178	0.050	0.99005	20.00000	Averaged
12 Benzyl alcohol	0.69098	0.66739	0.66739	0.050	-3.41529	30.00000	Averaged
13 1,2-Dichlorobenzene	1.41528	1.40542	1.40542	0.050	-0.69693	30.00000	Averaged
15 2-Methylphenol	1.08588	1.06532	1.06532	0.050	-1.89318	30.00000	Averaged
14 Bis(2-chloroisopropyl)ether	1.38786	1.39339	1.39339	0.050	0.39853	30.00000	Averaged
17 3- & 4-Methylphenol	1.09705	1.08652	1.08652	0.050	-0.96032	30.00000	Averaged
16 N-Nitroso-di-n-propylamine+	0.70966	0.66552	0.66552	0.050	-6.21964	30.00000	Averaged
18 Hexachloroethane	0.54554	0.55216	0.55216	0.050	1.21323	30.00000	Averaged
19 Nitrobenzene-d5	0.32649	0.32814	0.32814	0.050	0.50548	30.00000	Averaged
20 Nitrobenzene	0.31120	0.31166	0.31166	0.050	0.14619	30.00000	Averaged
21 Isophorone	0.49638	0.48588	0.48588	0.050	-2.11640	30.00000	Averaged
22 2-Nitrophenol +	0.20104	0.20996	0.20996	0.050	4.43605	20.00000	Averaged
23 2,4-Dimethylphenol	0.33764	0.34655	0.34655	0.050	2.64037	30.00000	Averaged
24 bis(-2-Chloroethoxy)methane	0.34215	0.33456	0.33456	0.050	-2.21678	30.00000	Averaged
25 Benzoic Acid	0.16310	0.12989	0.12989	0.050	-20.36367	30.00000	Averaged
26 2,4-Dichlorophenol +	0.29836	0.28972	0.28972	0.050	-2.89564	20.00000	Averaged
27 1,2,4-Trichlorobenzene	0.31960	0.31729	0.31729	0.050	-0.72243	30.00000	Averaged
29 Naphthalene	0.94918	0.93108	0.93108	0.050	-1.90722	30.00000	Averaged
30 4-Chloroaniline	0.34864	0.34443	0.34443	0.050	-1.20617	30.00000	Averaged
31 Hexachlorobutadiene +	0.18815	0.18602	0.18602	0.050	-1.12873	20.00000	Averaged
32 4-Chloro-3-Methylphenol +	0.26619	0.25097	0.25097	0.050	-5.71642	20.00000	Averaged
33 2-Methylnaphthalene	0.64925	0.60925	0.60925	0.050	-6.16101	30.00000	Averaged
145 1-Methylnapthalene	0.59047	0.56084	0.56084	0.050	-5.01803	30.00000	Averaged
34 Hexachlorocyclopentadiene +	0.31922	0.39788	0.39788	0.050	24.64415	30.00000	Averaged
35 2,4,6-Trichlorophenol +	49.07052	50.00000	0.41943	0.050	-1.85896	20.00000	Linear
36 2,4,5-Trichlorophenol	0.41250	0.44390	0.44390	0.050	7.61181	30.00000	Averaged
37 2-Fluorobiphenyl	1.31245	1.35749	1.35749	0.050	3.43117	30.00000	Averaged

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSSV4.i Injection Date: 17-JAN-2011 08:38  
Lab File ID: e8008.d Init. Cal. Date(s): 27-DEC-2010 12-JAN-2011  
Analysis Type: WATER Init. Cal. Times: 10:24 10:37  
Lab Sample ID: 1400 Quant Type: ISTD  
Method: /var/chem/MSSV4.i/2110117.s.b/8270CE\_04.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
38 2-Chloronaphthalene	1.14504	1.19855	1.19855	0.050	4.67262	30.00000	Averaged
39 2-Nitroaniline	0.41051	0.41886	0.41886	0.050	2.03339	30.00000	Averaged
40 Dimethylphthalate	1.22039	1.16389	1.16389	0.050	-4.62932	30.00000	Averaged
41 2,6-Dinitrotoluene	0.26238	0.25793	0.25793	0.050	-1.69861	30.00000	Averaged
42 Acenaphthylene	1.56191	1.54903	1.54903	0.050	-0.82449	30.00000	Averaged
43 3-Nitroaniline	0.31626	0.29927	0.29927	0.050	-5.37039	30.00000	Averaged
45 Acenaphthene +	1.06196	1.06652	1.06652	0.050	0.42946	20.00000	Averaged
46 2,4-Dinitrophenol ++	46.74133	50.00000	0.15678	0.050	-6.51734	30.00000	Quadratic
49 4-Nitrophenol ++	0.16921	0.14069	0.14069	0.050	-16.85613	30.00000	Averaged
47 Dibenzofuran	1.53557	1.50893	1.50893	0.050	-1.73445	30.00000	Averaged
48 2,4-Dinitrotoluene	0.34425	0.31592	0.31592	0.050	-8.22890	30.00000	Averaged
50 Diethylphthalate	1.08163	1.06226	1.06226	0.050	-1.79050	30.00000	Averaged
52 4-Chlorophenyl-phenylether	0.55830	0.53569	0.53569	0.050	-4.05114	30.00000	Averaged
51 Fluorene	1.13875	1.13014	1.13014	0.050	-0.75676	30.00000	Averaged
53 4-Nitroaniline	0.30497	0.27225	0.27225	0.050	-10.73153	30.00000	Averaged
54 4,6-Dinitro-o-cresol	45.28355	50.00000	0.13840	0.050	-9.43291	30.00000	Linear
55 N-nitrosodiphenylamine (1)+	0.54663	0.58869	0.58869	0.050	7.69565	20.00000	Averaged
56 Azobenzene	0.75125	0.82899	0.82899	0.050	10.34882	30.00000	Averaged
57 2,4,6-Tribromophenol	0.13394	0.12105	0.12105	0.050	-9.62502	30.00000	Averaged
58 4-Bromophenyl-phenylether	0.20383	0.21686	0.21686	0.050	6.39521	30.00000	Averaged
59 Hexachlorobenzene	0.21085	0.20501	0.20501	0.050	-2.76776	30.00000	Averaged
60 Pentachlorophenol +	46.51836	50.00000	0.14239	0.050	-6.96328	20.00000	Linear
62 Phenanthrene	1.06876	1.11894	1.11894	0.050	4.69509	30.00000	Averaged
63 Anthracene	1.04248	1.07636	1.07636	0.050	3.24985	30.00000	Averaged
64 Carbazole	0.98112	0.93334	0.93334	0.050	-4.86993	30.00000	Averaged
65 Di-n-butylphthalate	1.07293	1.07783	1.07783	0.050	0.45696	30.00000	Averaged
67 Fluoranthene +	0.94668	0.86493	0.86493	0.050	-8.63612	20.00000	Averaged
68 Benzidine	0.11461	0.06446	0.06446	0.050	-43.76294	30.00000	Averaged
69 Pyrene	1.23232	1.56145	1.56145	0.050	26.70862	30.00000	Averaged
70 Terphenyl-d14	0.79244	0.92944	0.92944	0.050	17.28849	30.00000	Averaged
71 Butylbenzylphthalate	52.99382	50.00000	0.63290	0.050	5.98764	30.00000	Linear
73 3,3'-Dichlorobenzidine	50.46831	50.00000	0.36214	0.050	0.93663	30.00000	Linear
72 Benzo(a)anthracene	1.11425	1.11067	1.11067	0.050	-0.32203	30.00000	Averaged
76 bis(2-Ethylhexyl)phthalate	50.84391	50.00000	0.76788	0.050	1.68781	30.00000	Linear
75 Chrysene	1.20225	1.18525	1.18525	0.050	-1.41444	30.00000	Averaged

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: MSSV4.i      Injection Date: 17-JAN-2011 08:38  
 Lab File ID: e8008.d      Init. Cal. Date(s): 27-DEC-2010    12-JAN-2011  
 Analysis Type: WATER      Init. Cal. Times:    10:24            10:37  
 Lab Sample ID: 1400      Quant Type: ISTD  
 Method: /var/chem/MSSV4.i/2110117.s.b/8270CE\_04.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
177 Di-n-octylphthalate +	50.34193	50.00000	1.07169	0.050	0.68385	20.00000	Linear
178 Benzo(b)fluoranthene	47.69499	50.00000	1.06153	0.050	-4.61002	30.00000	Quadratic
179 Benzo(k)fluoranthene	1.35899	1.47917	1.47917	0.050	8.84275	30.00000	Averaged
180 Benzo(a)pyrene +	1.03989	1.07634	1.07634	0.050	3.50563	20.00000	Averaged
182 Indeno(1,2,3-cd)pyrene	41.00736	50.00000	0.92212	0.050	-17.98528	30.00000	Linear
183 Dibenzo(a,h)anthracene	43.23254	50.00000	0.85819	0.050	-13.53493	30.00000	Linear
184 Benzo(g,h,i)perylene	41.79220	50.00000	0.95800	0.050	-16.41561	30.00000	Linear
M 66 Total Methylphenol	1.09146	1.07592	1.07592	0.050	-1.42436	30.00000	Averaged
191 Acetophenone	1.30490	1.25351	1.25351	0.050	-3.93798	30.00000	Averaged
155 Benzaldehyde	36.41362	50.00000	0.30293	0.050	-27.17276	30.00000	Quadratic
156 Caprolactam	0.07027	0.06224	0.06224	0.050	-11.42854	30.00000	Averaged
157 Biphenyl	0.71458	0.65745	0.65745	0.050	-7.99447	30.00000	Averaged
158 Atrazine	0.11879	0.12838	0.12838	0.050	8.06888	30.00000	Averaged
174 1,4-Dioxane	51.91553	50.00000	0.46387	0.050	3.83105	30.00000	Linear

Average %D / Drift Results.  
 =====  
 Calculated Average %D/Drift = 6.19585  
 Maximun Average %D/Drift = 30.00000  
 \* Passed Average %D/Drift Test.

8B  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GCAL  
Lab Code: LA024 Case No.: \_\_\_\_\_  
Lab File ID ( Standard ): 2110114/e7972  
Instrument ID: MSSV4  
Analytical Batch: 448983

Contract: \_\_\_\_\_  
SAS No.: \_\_\_\_\_ SDG No.: 211011405  
Date Analyzed: 01/14/11 Time: 1442  
GC Column: RTX-5MS-30 ID: .25 (mm)  
Method: SW-846 8270

	IS 1		IS 2		IS 3	
	Area	RT	Area	RT	Area	RT
STANDARD	413290	3.16	193833	4.23	282310	5.14

EPA Sample No.	#	#	#	#	#	#
1. MB912529	390492	3.16	194040	4.23	265019	5.14
2. T-15-F MSD	430512	3.16	217830	4.23	297327	5.14
3. T-21-F	426254	3.16	190897	4.23	239002	5.14
4. NC-0-0.3	374183	3.16	169222	4.23	230571	5.14
5. T-2-WEST	402967	3.16	186153	4.23	242141	5.14
6. T-6-FLOOR	426534	3.16	186213	4.23	243305	5.14
7. T-6-EAST	431891	3.16	196907	4.23	261558	5.14
8. T-6-SOUTH	413858	3.16	197126	4.23	260879	5.14
9. T-6-NORTH	410268	3.16	192810	4.23	252106	5.14
10. BLIND DUP	432228	3.16	194772	4.23	255574	5.14
11. SC-W	333542	3.16	150529	4.23	212227	5.14
12. LCS912530	350297	3.16	166774	4.23	232945	5.14
13. SC-E	447213	3.16	215381	4.23	287272	5.14
14. LCSD912531	372481	3.16	178672	4.23	254533	5.14
15. EQUIPMENT BLANK	281450	3.16	137066	4.23	202373	5.14
16. MB912490	354388	3.16	180114	4.23	253895	5.14
17. LCS912491	343667	3.16	169127	4.23	235722	5.14
18. LCSD912492	484846	3.16	232203	4.23	298478	5.14
19. T-15-F	434600	3.16	222302	4.23	318057	5.14
20. T-15-F MS	355249	3.16	162522	4.23	219100	5.14

IS 1 ID : Naphthalene-d8  
IS 2 ID : Acenaphthene-d10  
IS 3 ID : Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area  
AREALOWER LIMIT = -50% of internal standard area  
RT UPPER LIMIT = +0.50 minutes of internal standard RT  
RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag internal standard values with an asterisk.  
\* Values outside of QC limits.

## SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: \_\_\_\_\_

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Lab File ID ( Standard ): 2110114/e7972

Date Analyzed: 01/14/11 Time: 1442

Instrument ID: MSSV4

GC Column: RTX-5MS-30 ID: .25 (mm)

Method: SW-846 8270

		IS 4		IS 5		IS 6			
		Area	RT	Area	RT	Area	RT		
STANDARD		157131	8.07	196359	6.95	120746	2.42		
		#	#	#	#	#	#		
1.	MB912529	110011	8.07	147738	6.95	109326	2.43		
2.	T-15-F MSD	160991	8.07	192516	6.95	125299	2.42		
3.	T-21-F	165633	8.08	160347	6.95	132632	2.43		
4.	NC-0-0.3	243561	8.08	196972	6.96	116852	2.43		
5.	T-2-WEST	195075	8.08	173021	6.95	118807	2.43		
6.	T-6-FLOOR	204739	8.08	182758	6.95	130748	2.43		
7.	T-6-EAST	216971	8.07	185618	6.95	119937	2.43		
8.	T-6-SOUTH	218837	8.08	203066	6.95	125574	2.43		
9.	T-6-NORTH	208009	8.08	185357	6.95	121593	2.43		
10.	BLIND DUP	218439	8.08	194026	6.95	124904	2.43		
11.	SC-W	236097	8.08	187200	6.96	107541	2.42		
12.	LCS912530	126441	8.07	152802	6.96	104684	2.43		
13.	SC-E	221458	8.08	209057	6.95	132651	2.43		
14.	LCSD912531	133745	8.07	169957	6.95	106123	2.43		
15.	EQUIPMENT BLANK	101197	8.07	128135	6.95	83106	2.42		
16.	MB912490	144498	8.07	180527	6.95	101409	2.42		
17.	LCS912491	146282	8.07	181324	6.96	100755	2.42		
18.	LCSD912492	156083	8.07	205243	6.96	138205	2.43		
19.	T-15-F	168475	8.07	197329	6.95	124128	2.42		
20.	T-15-F MS	153371	8.07	172241	6.96	105934	2.42		

IS 4 ID : Perylene-d12

IS 5 ID : Chrysene-d12

IS 6 ID : 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREALOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag internal standard values with an asterisk.

\* Values outside of QC limits.

8B  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: GCAL  
 Lab Code: LA024 Case No.: \_\_\_\_\_  
 Lab File ID ( Standard ): 2110117/e8008  
 Instrument ID: MSSV4  
 Analytical Batch: 449083

Contract: \_\_\_\_\_  
 SAS No.: \_\_\_\_\_ SDG No.: 211011405  
 Date Analyzed: 01/17/11 Time: 0838  
 GC Column: RTX-5MS-30 ID: .25 (mm)  
 Method: SW-846 8270

	IS 1		IS 2		IS 3	
	Area	RT	Area	RT	Area	RT
STANDARD	550303	3.17	257177	4.23	348019	5.14
<b>EPA Sample No.</b>	#	#	#	#	#	#
1. T-21-F	391142	3.16	184711	4.23	249272	5.14

IS 1 ID : Naphthalene-d8  
 IS 2 ID : Acenaphthene-d10  
 IS 3 ID : Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area  
 AREALOWER LIMIT = -50% of internal standard area  
 RT UPPER LIMIT = +0.50 minutes of internal standard RT  
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag internal standard values with an asterisk.  
 \* Values outside of QC limits.

## SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: \_\_\_\_\_

Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Lab File ID ( Standard ): 2110117/e8008

Date Analyzed: 01/17/11 Time: 0838

Instrument ID: MSSV4

GC Column: RTX-5MS-30 ID: .25 (mm)

Method: SW-846 8270

	IS 4		IS 5		IS 6	
	Area	RT	Area	RT	Area	RT
STANDARD	163880	8.08	198959	6.96	162920	2.43
	#	#	#	#	#	#
1. T-21-F	121766	8.08	152267	6.96	113225	2.43

IS 4 ID : Perylene-d12

IS 5 ID : Chrysene-d12

IS 6 ID : 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREALOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag internal standard values with an asterisk.

\* Values outside of QC limits.

## BASE NEUTRAL/ACID SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME: 1-14-11		Start: 1030		End: 1403		BATCH NO: 448916		8270C	
MATRIX:		WATER <input type="checkbox"/> SOIL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		LEVEL:		LOW <input checked="" type="checkbox"/> MEDIUM <input type="checkbox"/>			
CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT mL g	FINAL VOLUME (mL)	BN pH	Acid pH	SAMPLE TYPE	COMMENTS	METHOD
1	QC ACCOUNT	MB for HBN 448916 [EXTO/27518]	912490	30.1	1.0		MB	-	LIQUID LIQUID/3520
2	QC ACCOUNT	LCS for HBN 448916 [EXTO/27518]	912491	30.2	1.0		LCS	-	
3	QC ACCOUNT	LCSD for HBN 448916 [EXTO/27518]	912492	30.3	1.0		LCSD	-	SEPARATORY FUNNEL/3510
4	4482	T-15-F	21101140501	30.1	1.0		SAMPLE	625_SPK	
5	4482	T-15-F MS	21101140502	30.0	1.0		MS	625_SPK	SONICATOR/3550
6	4482	T-15-F MSD	21101140503	30.0	1.0		MSD	625_SPK	
7	4482	T-21-F	21101140504	30.0	1.0		SAMPLE	625_SPK	SOXHLET/3540
8	4482	NC-0-0.3	21101140505	30.2	1.0		SAMPLE	625_SPK	
9	4482	T-2-WEST	21101140506	30.0	1.0		SAMPLE	625_SPK	GPC CLEANUP/3640
10	4482	T-6-FLOOR	21101140507	30.1	1.0		SAMPLE	625_SPK	
11	4482	T-6-EAST	21101140508	30.0	1.0		SAMPLE	625_SPK	WASTE DILUTION/3580
12	4482	T-6-SOUTH	21101140509	30.4	1.0		SAMPLE	625_SPK	
13	4482	T-6-NORTH	21101140510	30.2	1.0		SAMPLE	625_SPK	TCLP EXTRACTION FLUID 1
14	4482	BLIND DUP	21101140511	30.1	1.0		FLDDUP	625_SPK	
15	4482	SC-W	21101140512	30.0	1.0		SAMPLE	625_SPK	TCLP EXTRACTION FLUID 2
16	4482	SC-E	21101140513	30.2	1.0		SAMPLE	625_SPK	
17			21101140501	30.1	1.0				MECL2/Acetone No:
18									
19									ACETONE LOT NO:
20									105788
21									MeCL2 Lot No:
22									105359
23									Sodium Sulfate Lot No:
24									104119
25									
26									
27									
28									

COMMENTS: SAMPLE PREPARATION INCLUDE DETERMINATION OF SAMPLE VOLUME/WEIGHT, SOLVENT EXTRACTION AND EVAPORATION OF SOLVENT TO FINAL VOLUME

BALANCE ID: SN7123450167

TEMP: \_\_\_\_\_

SURROGATE ID	867-22	8270 SPIKE ID		625 SPIKE ID	495-40-2	TECHNICIAN	DATE
VOLUME	1.0L	VOLUME		VOLUME	1.0L	Chauhan	1/14/11
CONCENTRATION	100ug/mL	CONCENTRATION		CONCENTRATION	100ug/mL		1/14/11
NaOH		ACID				SUPERVISOR	DATE
SPIKE WITNESS	8102					RND	1/14/11

Revision 3, 10/04/2010

## BASE NEUTRAL/ACID SAMPLE PREPARATION FORM

EXTRACTION DATE/TIME: 1-14-11		Start: 1135		End: 1306		BATCH NO: 448924		8270 (625 spk)	
MATRIX:		WATER <input checked="" type="checkbox"/>		SOIL <input type="checkbox"/>		OTHER <input type="checkbox"/>		LEVEL: LOW <input checked="" type="checkbox"/> MEDIUM <input type="checkbox"/>	
CLIENT	CLIENT ID	GCAL ID	INITIAL VOL/WT (mL) g	FINAL VOLUME (mL)	BN pH	Acid pH	SAMPLE TYPE	COMMENTS	METHOD
1	QC ACCOUNT	MB for HBN 448924 [EXTO/27520]	912529	1000	1.0	>11 <2	MB	-	LIQUID LIQUID/3520
2	QC ACCOUNT	LCS for HBN 448924 [EXTO/27520]	912530	1000	1.0	>11 <2	LCS	-	
3	QC ACCOUNT	LCSD for HBN 448924 [EXTO/27520]	912531	1000	1.0	>11 <2	LCSD	-	SEPARATORY FUNNEL/3510
4	4482	EQUIPMENT BLANK	21101140514	990	1.0	>11 <2	EQBK	625_SPK	✓
5									SONICATOR/3550
6									
7									SOXHLET/3540
8									
9									GPC CLEANUP/3640
10									
11									WASTE DILUTION/3580
12									
13									TCLP EXTRACTION FLUID 1
14									TCLP EXTRACTION FLUID 2
15									MECL2/Acetone No:
16									
17									ACETONE LOT NO:
18									
19									MeCL2 Lot No:
20									105359
21									Sodium Sulfate Lot No:
22									103437
23									
24									
25									
26									
27									
28									

COMMENTS: SAMPLE PREPARATION INCLUDE DETERMINATION OF SAMPLE VOLUME/WEIGHT, SOLVENT EXTRACTION AND EVAPORATION OF SOLVENT TO FINAL VOLUME

BALANCE ID:

n/a

TEMP:

101

SURROGATE ID	507-2-2	8270 SPIKE ID		625 SPIKE ID	43546-2	TECHNICIAN	DATE
VOLUME	1.224	VOLUME		VOLUME	1.224		1-14-11
CONCENTRATION	500 ug/ml	CONCENTRATION		CONCENTRATION	100 ug/ml		
NaOH	500-1-4	ACID	30-34			SUPERVISOR	DATE
SPIKE WITNESS							1-14-11

Revision 3, 10/04/2010

# LABORATORY CHRONICLE: MSSV DEPARTMENT

Date: 12-JAN-2011  
Instrument: MSSV4.i

Standard

DFTPP

Int. Standard

Conc

ppm

50

4000

Lot No.

Inst. Conditions: \_\_\_\_\_

MISC: \_\_\_\_\_

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
1100	42-9-11	e7895c.d	0.00 ml	12-JAN-2011 07:43	1.000	KCB	1	all
1100	42-9-11	e7895.d	0.00 ml	12-JAN-2011 07:43	1.000	KCB	1	all
1100	42-9-11	e7895d.d	1000.00 ml	12-JAN-2011 07:43	1.000	KCB	1	all
1400	42-7-1	e7896.d	1000.00 ml	12-JAN-2011 08:00	1.000	KCB	2	8270c
1205	42-7-1	e7897.d	1000.00 ml	12-JAN-2011 08:21	1.000	KCB	2	8270c
1205	42-7-1	e7897d.d	1000.00 ml	12-JAN-2011 08:21	1.000	KCB	2	8270c
1204	42-7-2	e7898.d	1000.00 ml	12-JAN-2011 08:38	1.000	KCB	3	8270c
1204	42-7-2	e7898d.d	1000.00 ml	12-JAN-2011 08:38	1.000	KCB	3	8270c
1206	42-7-3	e7899.d	1000.00 ml	12-JAN-2011 08:54	1.000	KCB	4	8270c
1206	42-7-3	e7899d.d	1000.00 ml	12-JAN-2011 08:54	1.000	KCB	4	8270c
1207	42-7-4	e7900.d	1000.00 ml	12-JAN-2011 09:11	1.000	KCB	5	8270c
1207	42-7-4	e7900d.d	1000.00 ml	12-JAN-2011 09:11	1.000	KCB	5	8270c
1208	42-7-5	e7901.d	1000.00 ml	12-JAN-2011 09:28	1.000	KCB	6	8270c
1208	42-7-5	e7901d.d	1000.00 ml	12-JAN-2011 09:28	1.000	KCB	6	8270c
1209	42-7-6	e7902.d	1000.00 ml	12-JAN-2011 09:45	1.000	KCB	7	8270c
1209	42-7-6	e7902d.d	1000.00 ml	12-JAN-2011 09:45	1.000	KCB	7	8270c
1203	42-7-7	e7903.d	1000.00 ml	12-JAN-2011 10:02	1.000	KCB	8	8270c
1203	42-7-7	e7903d.d	1000.00 ml	12-JAN-2011 10:02	1.000	KCB	8	8270c
1202	42-7-8	e7904.d	1000.00 ml	12-JAN-2011 10:19	1.000	KCB	9	8270c
1201	42-7-9	e7905.d	1000.00 ml	12-JAN-2011 10:37	1.000	KCB	10	8270c
1600	42-7-10	e7906.d	1000.00 ml	12-JAN-2011 10:54	1.000	KCB	11	SA8270
1600	42-7-10	e7907.d	1000.00 ml	12-JAN-2011 11:49	1.000	KCB	11	SA8270
1600	42-7-10	e7907d.d	1000.00 ml	12-JAN-2011 11:49	1.000	KCB	11	SA8270
911074	BLK	e7908.d	30.10 g	12-JAN-2011 12:22	1.000	KCB	12	176115
911075	LCS	e7909.d	30.00 g	12-JAN-2011 12:39	1.000	KCB	13	176115
911076	LCSD	e7910.d	30.00 g	12-JAN-2011 12:56	1.000	KCB	14	176115
21101080701	4744	e7911.d	30.00 g	12-JAN-2011 13:16	10.000	KCB	15	176115
21101080701	4744	e7912.d	30.00 g	12-JAN-2011 13:39	2.000	KCB	37	176115
911077	MS	e7913.d	30.20 g	12-JAN-2011 13:55	2.000	KCB	16	176115
911078	MSD	e7914.d	30.10 g	12-JAN-2011 14:11	2.000	KCB	17	176115
21101080702	4744	e7915.d	30.20 g	12-JAN-2011 14:28	1.000	KCB	18	176115
21101080703	4744	e7916.d	30.10 g	12-JAN-2011 14:44	1.000	KCB	19	176115
21101080704	4744	e7917.d	30.20 g	12-JAN-2011 15:01	1.000	KCB	20	176115
21101080705	4744	e7918.d	30.30 g	12-JAN-2011 15:18	1.000	KCB	21	176115
911077	MS	e7919.d	30.20 g	12-JAN-2011 15:35	2.000	KCB	38	176115
911077	MS	e7920.d	30.20 g	12-JAN-2011 15:54	2.000	KCB	38	176115

# LABORATORY CHRONICLE: MSSV DEPARTMENT

Date: 14-JAN-2011  
Instrument: MSSV4.i

Standard

DFTPP

Int. Standard

Conc  
ppm  
50

4000

Lot No.

Inst. Conditions: \_\_\_\_\_

MISC: \_\_\_\_\_

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
1100	42-9-11	e7970c.d	0.00 ml	14-JAN-2011 14:09	1.000	KCB	1	all
1100	42-9-11	e7970.d	0.00 ml	14-JAN-2011 14:09	1.000	KCB	1	all
1100	42-9-11	e7970d.d	0.00 ml	14-JAN-2011 14:09	1.000	KCB	1	all
1400	42-7-1	e7971.d	1000.00 ml	14-JAN-2011 14:26	1.000	KCB	2	SA8270
1400	42-7-1	e7972.d	1000.00 ml	14-JAN-2011 14:42	1.000	KCB	2	8270c
1400	42-7-1	e7972d.d	1000.00 ml	14-JAN-2011 14:42	1.000	KCB	2	8270c
912529	BLK	e7973.d	1000.00 ml	14-JAN-2011 14:59	1.000	KCB	3	SA8270
912530	LCS	e7974.d	1000.00 ml	14-JAN-2011 15:16	1.000	KCB	4	8270qc
912531	LCSD	e7975.d	1000.00 ml	14-JAN-2011 15:33	1.000	KCB	5	8270qc
21101140514	4482	e7976.d	990.00 ml	14-JAN-2011 15:49	1.000	KCB	6	SA8270
912490	BLK	e7977.d	30.10 g	14-JAN-2011 16:06	1.000	KCB	7	SA8270
912491	LCS	e7978.d	30.20 g	14-JAN-2011 16:23	1.000	KCB	8	8270qc
912492	LCSD	e7979.d	30.30 g	14-JAN-2011 16:39	1.000	KCB	9	8270qc
21101140501	4482	e7980.d	30.10 g	14-JAN-2011 16:56	1.000	KCB	10	SA8270
21101140502	MS	e7981.d	30.00 g	14-JAN-2011 17:13	1.000	KCB	11	8270qc
21101140503	MSD	e7982.d	30.00 g	14-JAN-2011 17:29	1.000	KCB	12	8270qc
21101140504	4482	e7983.d	30.00 g	14-JAN-2011 17:46	1.000	KCB	13	SA8270
21101140505	4482	e7984.d	30.20 g	14-JAN-2011 18:03	1.000	KCB	14	SA8270
21101140506	4482	e7985.d	30.00 g	14-JAN-2011 18:19	1.000	KCB	15	SA8270
21101140507	4482	e7986.d	30.10 g	14-JAN-2011 18:36	1.000	KCB	16	SA8270
21101140508	4482	e7987.d	30.00 g	14-JAN-2011 18:53	1.000	KCB	17	SA8270
21101140509	4482	e7988.d	30.40 g	14-JAN-2011 19:09	1.000	KCB	18	SA8270
21101140510	4482	e7989.d	30.20 g	14-JAN-2011 19:26	1.000	KCB	19	SA8270
21101140511	4482	e7990.d	30.10 g	14-JAN-2011 19:43	1.000	KCB	20	SA8270
21101140512	4482	e7991.d	30.00 g	14-JAN-2011 20:00	1.000	KCB	21	SA8270
21101140513	4482	e7992.d	30.20 g	14-JAN-2011 20:16	1.000	KCB	22	SA8270
912532	BLK	e7993.d	30.10 g	14-JAN-2011 20:33	1.000	KCB	24	176115
912533	LCS	e7994.d	30.00 g	14-JAN-2011 20:50	1.000	KCB	25	176115
912534	LCSD	e7995.d	30.20 g	14-JAN-2011 21:06	1.000	KCB	26	176115
21101140612	4744	e7996.d	30.10 g	14-JAN-2011 21:23	1.000	KCB	27	176115
912733	MS	e7997.d	30.00 g	14-JAN-2011 21:40	1.000	KCB	28	176115
912734	MSD	e7998.d	30.00 g	14-JAN-2011 21:57	1.000	KCB	29	176115
21101140613	4744	e7999.d	30.30 g	14-JAN-2011 22:14	1.000	KCB	30	176115
21101140614	4744	e8000.d	30.20 g	14-JAN-2011 22:30	1.000	KCB	31	176115
21101140801	4692	e8001.d	30.10 g	14-JAN-2011 22:47	5.000	KCB	23	pah++lcs
SOL BLK	SOL BLK	e8002.d	1000.00 ml	14-JAN-2011 23:57	1.000	KCB	100	SA8270

# LABORATORY CHRONICLE: MSSV DEPARTMENT

Date: 17-JAN-2011  
Instrument: MSSV4.i

Standard

DETPP

Int. Standard

Conc

ppm

50

4000

Lot No.

Inst. Conditions: \_\_\_\_\_

MISC: \_\_\_\_\_

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
1100	42-9-11	e8006.d	0.00 ml	17-JAN-2011 08:05	1.000	KCB	1	all
1100	42-9-11	e8007c.d	0.00 ml	17-JAN-2011 08:22	1.000	KCB	1	all
1100	42-9-11	e8007.d	0.00 ml	17-JAN-2011 08:22	1.000	KCB	1	all
1400	42-7-1	e8008.d	1000.00 ml	17-JAN-2011 08:38	1.000	KCB	2	8270c
21101140504	4482	e8009.d	30.00 g	17-JAN-2011 08:56	10.000	KCB	3	SA8270
SOL BLK	SOL BLK	e8010.d	1000.00 ml	17-JAN-2011 09:13	1.000	KCB	100	SA8270
1400	42-2-2	e8011.d	1000.00 ml	17-JAN-2011 14:03	1.000	KCB	4	APP9
913174	BLK	e8012.d	30.00 g	17-JAN-2011 14:20	1.000	KCB	5	SA8270
913175	LCS	e8013.d	30.00 g	17-JAN-2011 14:37	1.000	KCB	6	lcs
913173	LCSD	e8014.d	30.00 g	17-JAN-2011 14:53	1.000	KCB	7	lcs
21101143101	4260	e8015.d	17.10 g	17-JAN-2011 15:10	5.000	KCB	8	SA8270
21101143102	4260	e8016.d	30.00 g	17-JAN-2011 15:26	5.000	KCB	9	SA8270
913174	BLK	e8017.d	30.00 g	17-JAN-2011 15:53	1.000	KCB	5	SA8270
913175	LCS	e8018.d	30.00 g	17-JAN-2011 16:29	1.000	KCB	6	SA8270
913173	LCSD	e8019.d	30.00 g	17-JAN-2011 16:45	1.000	KCB	7	lcs
913175	LCS	e8020.d	30.00 g	17-JAN-2011 17:02	1.000	KCB	6	lcs
913173	LCSD	e8021.d	30.00 g	17-JAN-2011 17:19	1.000	KCB	7	lcs
913175	LCS	e8022.d	30.00 g	17-JAN-2011 17:35	1.000	KCB	6	lcs
SOL BLK	SOL BLK	e8023.d	1000.00 ml	17-JAN-2011 17:52	1.000	KCB	100	SA8270
SOL BLK	SOL BLK	e8024.d	1000.00 ml	17-JAN-2011 18:08	1.000	KCB	100	SA8270
SOL BLK	SOL BLK	e8025.d	1000.00 ml	17-JAN-2011 18:24	1.000	KCB	100	SA8270

## CHAIN OF CUSTODY RECORD

Lab use only

Client Name POW

Client # 4462

Workorder # 211011405

Due Date 1-15-11

### Report to:

Client: Pastor, Behney & Wheeler  
Address: 2201 Double Creek Dr.  
Ste 4004  
Contact: Eric Pastor  
Phone: 512-671-3434  
Fax: 512-671-3446

### Bill to:

Client: Same  
Address: Same  
Contact: Same  
Phone: Same  
Fax: Same

### Analytical Requests & Method

### Lab use only:

Custody Seal

used ☒ yes ☐ no

intact ☒ yes ☐ no

Temperature °C 3.7 4.9 4.2

P.O. Number

1597 B

Project Name/Number

Gul/co AST Removal

Sampled By:

T. Jennings

Matrix <sup>1</sup>	Date	Time (2400)	Comp	Grab	Sample Description	Preservatives	No Con-tainers	Lab ID
S	1/13/11	1400	X		T-15-F	None	15	1
S	1/13/11	1445	X		T-21-F	None	5	2
S	1/13/11	1455	X		NC-0-03	None	5	3
S	1/13/11	1505	X		T-2-West	None	5	4
S	1/13/11	1535	X		T-6-Floor	None	5	5
S	1/13/11	1555	X		T-6-East	None	5	6
S	1/13/11	1615	X		T-6-South	None	5	7
S	1/13/11	1625	X		T-6-North	None	5	8
S	1/13/11	-	X		Blind Dup	None	5	9
S	1/13/11	1645	X		SC-W	None	5	10
S	1/13/11	1655	X		SC-E	None	5	11
W	1/13/11	1710	X		Equip Blank	None	5	12
W	1/13/11	1715			Trip Blank 1	None	3	13
W	1/13/11	1720			Trip Blank 2	None	3	14

Turn Around Time: ☒ 24-48 hrs. ☐ 3 days ☐ 1 week ☐ Standard ☐ Other

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Note:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

# PRESERVATION CHECKLIST / COOLER RECEIPT

Gulf Coast Analytical Laboratories, Inc.

WO: 211011405

Type: D

Desc:

Report: REVIEW\_RPT

Work ID: GULFCO

Status: WP

Project Seq: 113065

Created: 1/14/2011 8:59

Client: 4482 - Pastor, Behling, & Wheeler

QA:

Profile: 201917 - GULFCO-III - GULFCO

PO: 1352

## WORKORDER SAMPLES

Container ID	Type	Preservative	pH PRESERVATIVE			VOA HEADSPACE			CONTAINER CONDITION
			A	U	N/A	A	U	N/A	
21101140501-1	OC	NONE			X			X	OK
21101140501-2	OC	NONE			X			X	OK
21101140501-3	OC	NONE			X			X	OK
21101140501-4	OC	NONE			X			X	OK
21101140501-5	8	NONE			X			X	OK
Container ID	Type	Preservative	A	U	N/A	A	U	N/A	CONTAINER CONDITION
21101140502-1	OC	NONE			X			X	OK
21101140502-2	OC	NONE			X			X	OK
21101140502-3	OC	NONE			X			X	OK
21101140502-4	OC	NONE			X			X	OK
21101140502-5	8	NONE			X			X	OK
Container ID	Type	Preservative	A	U	N/A	A	U	N/A	CONTAINER CONDITION
21101140503-1	OC	NONE			X			X	OK
21101140503-2	OC	NONE			X			X	OK
21101140503-3	OC	NONE			X			X	OK
21101140503-4	OC	NONE			X			X	OK
21101140503-5	8	NONE			X			X	OK
Container ID	Type	Preservative	A	U	N/A	A	U	N/A	CONTAINER CONDITION
21101140504-1	OC	NONE			X			X	OK
21101140504-2	OC	NONE			X			X	OK
21101140504-3	OC	NONE			X			X	OK
21101140504-4	OC	NONE			X			X	OK
21101140504-5	8	NONE			X			X	OK

Container ID	Type	Preservative	pH PRESERVATIVE			VOA HEADSPACE			CONTAINER CONDITION
			A	U	N/A	A	U	N/A	
21101140505-1	OC	NONE			X			X	OK
21101140505-2	OC	NONE			X			X	OK
21101140505-3	OC	NONE			X			X	OK
21101140505-4	OC	NONE			X			X	OK
21101140505-5	8	NONE			X			X	OK
Container ID	Type	Preservative	A	U	N/A	A	U	N/A	CONTAINER CONDITION
21101140506-1	OC	NONE			X			X	OK
21101140506-2	OC	NONE			X			X	OK
21101140506-3	OC	NONE			X			X	OK
21101140506-4	OC	NONE			X			X	OK
21101140506-5	8	NONE			X			X	OK
Container ID	Type	Preservative	A	U	N/A	A	U	N/A	CONTAINER CONDITION
21101140507-1	OC	NONE			X			X	OK
21101140507-2	OC	NONE			X			X	OK
21101140507-3	OC	NONE			X			X	OK
21101140507-4	OC	NONE			X			X	OK
21101140507-5	8	NONE			X			X	OK
Container ID	Type	Preservative	A	U	N/A	A	U	N/A	CONTAINER CONDITION
21101140508-1	OC	NONE			X			X	OK
21101140508-2	OC	NONE			X			X	OK
21101140508-3	OC	NONE			X			X	OK
21101140508-4	OC	NONE			X			X	OK
21101140508-5	8	NONE			X			X	OK
Container ID	Type	Preservative	A	U	N/A	A	U	N/A	CONTAINER CONDITION
21101140509-1	OC	NONE			X			X	OK
21101140509-2	OC	NONE			X			X	OK
21101140509-3	OC	NONE			X			X	OK
21101140509-4	OC	NONE			X			X	OK
21101140509-5	8	NONE			X			X	OK
Container ID	Type	Preservative	A	U	N/A	A	U	N/A	CONTAINER CONDITION
21101140510-1	OC	NONE			X			X	OK
21101140510-2	OC	NONE			X			X	OK
21101140510-3	OC	NONE			X			X	OK
21101140510-4	OC	NONE			X			X	OK
21101140510-5	8	NONE			X			X	OK

Container ID	Type	Preservative	pH PRESERVATIVE			VOA HEADSPACE			CONTAINER CONDITION
			A	U	N/A	A	U	N/A	
21101140511-1	OC	NONE			X			X	OK
21101140511-2	OC	NONE			X			X	OK
21101140511-3	OC	NONE			X			X	OK
21101140511-4	OC	NONE			X			X	OK
21101140511-5	8	NONE			X			X	OK
Container ID	Type	Preservative	A	U	N/A	A	U	N/A	CONTAINER CONDITION
21101140512-1	OC	NONE			X			X	OK
21101140512-2	OC	NONE			X			X	OK
21101140512-3	OC	NONE			X			X	OK
21101140512-4	OC	NONE			X			X	OK
21101140512-5	8	NONE			X			X	OK
Container ID	Type	Preservative	A	U	N/A	A	U	N/A	CONTAINER CONDITION
21101140513-1	OC	NONE			X			X	OK
21101140513-2	OC	NONE			X			X	OK
21101140513-3	OC	NONE			X			X	OK
21101140513-4	OC	NONE			X			X	OK
21101140513-5	8	NONE			X			X	OK
Container ID	Type	Preservative	A	U	N/A	A	U	N/A	CONTAINER CONDITION
21101140514-1	LA	NONE			X			X	OK
21101140514-2	LA	NONE			X			X	OK
21101140514-3	40	HCL			Z Z				OK
21101140514-4	40	HCL							OK
21101140514-5	40	HCL							OK
Container ID	Type	Preservative	A	U	N/A	A	U	N/A	CONTAINER CONDITION
21101140515-1	40	HCL			Z Z				OK
21101140515-2	40	HCL							OK
21101140515-3	40	HCL							OK
Container ID	Type	Preservative	A	U	N/A	A	U	N/A	CONTAINER CONDITION
21101140516-1	40	HCL			Z Z				OK
21101140516-2	40	HCL							OK
21101140516-3	40	HCL							OK

pH PRESERVATIVE

VOA HEADSPACE

A = ACCEPTABLE

U = UNACCEPTABLE

N/A = NOT APPLICABLE

COOLER (S) TEMPERATURE

A

U

LIMIT = 4C + \ - 2C

MAXIMUM VOLATILE HEADSPACE BUBBLE 6MM

**Custody Seal**

used ☐ Yes ☐ No

in tact ☐ Yes ☐ No

LABEL(S)

VERIFIED

CUSTODIAN

N

# **ANALYTICAL RESULTS**

**PERFORMED BY**

**GULF COAST ANALYTICAL LABORATORIES, INC.**

**7979 GSRI Avenue  
Baton Rouge, LA 70820**

**Report Date 01/20/2011**

**GCAL Report 211011920**



***Deliver To*** Pastor, Behling, Wheeler  
2201 Double Creek Drive  
Round Rock, TX 78664  
512-671-3434

***Attn*** Eric Pastor

***Project*** GULFCO

## CASE NARRATIVE

**Client:** Pastor, Behling, Wheeler      **Report:** 211011920

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

**No anomalies were found for the analyzed sample(s).**

# Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

## Common Abbreviations Utilized in this Report

<b>ND</b>	Indicates the result was Not Detected at the specified RDL
<b>DO</b>	Indicates the result was Diluted Out
<b>MI</b>	Indicates the result was subject to Matrix Interference
<b>TNTC</b>	Indicates the result was Too Numerous To Count
<b>SUBC</b>	Indicates the analysis was Sub-Contracted
<b>FLD</b>	Indicates the analysis was performed in the Field
<b>PQL</b>	Practical Quantitation Limit
<b>MDL</b>	Method Detection Limit
<b>RDL</b>	Reporting Detection Limit
<b>00:00</b>	Reported as a time equivalent to 12:00 AM

## Reporting Flags Utilized in this Report

<b>J</b>	Indicates an estimated value
<b>U</b>	Indicates the compound was analyzed for but not detected
<b>B</b>	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
<b>B</b>	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with [NELAC](#), this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

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Robyn Miguez  
Technical Director  
**GCAL REPORT 211011920**

THIS REPORT CONTAINS \_\_\_\_\_ PAGES.

# Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21101192001	N. CONTAINMENT-2	Water	01/18/2011 13:35	01/19/2011 10:30
21101192002	TRIP BLANK	Water	01/18/2011 13:45	01/19/2011 10:30

# Summary of Compounds Detected

There were no detects

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21101192001	N. CONTAINMENT-2	Water	01/18/2011 13:35	01/19/2011 10:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	01/19/2011 12:27	RJU	449216

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	5U	5	0.086	ug/L
71-43-2	Benzene	5U	5	0.054	ug/L
67-66-3	Chloroform	5U	5	0.057	ug/L
127-18-4	Tetrachloroethene	5U	5	0.121	ug/L
79-01-6	Trichloroethene	5U	5	0.062	ug/L
75-01-4	Vinyl chloride	5U	5	0.093	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	46.4	ug/L	93	78 - 130
1868-53-7	Dibromofluoromethane	50	50.3	ug/L	101	77 - 127
2037-26-5	Toluene d8	50	48.9	ug/L	98	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	47.5	ug/L	95	71 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21101192002	TRIP BLANK	Water	01/18/2011 13:45	01/19/2011 10:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	01/19/2011 11:19	RJU	449216

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	5U	5	0.086	ug/L
71-43-2	Benzene	5U	5	0.054	ug/L
67-66-3	Chloroform	5U	5	0.057	ug/L
127-18-4	Tetrachloroethene	5U	5	0.121	ug/L
79-01-6	Trichloroethene	5U	5	0.062	ug/L
75-01-4	Vinyl chloride	5U	5	0.093	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	46.9	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	50	50.4	ug/L	101	77 - 127
2037-26-5	Toluene d8	50	49.3	ug/L	99	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.6	ug/L	97	71 - 127

# GC/MS Volatiles Quality Control Summary

Analytical Batch 449216 Prep Batch N/A		Client ID GCAL ID Sample Type Analytical Date Matrix		MB449216 913959 Method Blank 01/19/2011 10:45 Water		LCS449216 913960 LCS 01/19/2011 07:36 Water			LCSD449216 913961 LCSD 01/19/2011 08:16 Water					
SW-846 8260B				Units Result		ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
67-66-3	Chloroform	5U	5	50.0	46.9	94	75 - 122	44.1	88	6	30			
107-06-2	1,2-Dichloroethane	5U	5	50.0	44.4	89	71 - 129	42.7	85	4	30			
127-18-4	Tetrachloroethene	5U	5	50.0	45.0	90	68 - 128	43.8	88	3	30			
75-01-4	Vinyl chloride	5U	5	50.0	45.6	91	68 - 132	42.9	86	6	30			
75-35-4	1,1-Dichloroethene	5U	5	50.0	46.5	93	69 - 129	44.2	88	5	20			
71-43-2	Benzene	5U	5	50.0	45.5	91	70 - 129	44.1	88	3	20			
79-01-6	Trichloroethene	5U	5	50.0	44.8	90	76 - 129	43.2	86	4	20			
108-88-3	Toluene	5U	5	50.0	46.4	93	72 - 120	45.2	90	3	20			
108-90-7	Chlorobenzene	5U	5	50.0	46.1	92	74 - 123	44.9	90	3	20			
Surrogate														
460-00-4	4-Bromofluorobenzene	46.3	93	50	49.8	100	78 - 130	49.2	98					
1868-53-7	Dibromofluoromethane	49.5	99	50	50.6	101	77 - 127	50.3	101					
2037-26-5	Toluene d8	49	98	50	47.3	95	76 - 134	47.8	96					
17060-07-0	1,2-Dichloroethane-d4	48	96	50	48.5	97	71 - 127	48.7	97					

<b>Analytical Batch</b> 449216 <b>Prep Batch</b> N/A		<b>Client ID</b> <b>GCAL ID</b> <b>Sample Type</b> <b>Analytical Date</b> <b>Matrix</b>	B169-ZONE 4-011211-WC 21101140606 SAMPLE 01/19/2011 11:42 Solid		912500MS 913981 MS 01/19/2011 13:14 Solid			912500MSD 913982 MSD 01/19/2011 13:36 Solid				
<b>SW-846 8260B</b>			<b>Units</b> <b>Result</b>	ug/L RDL	<b>Spike</b> <b>Added</b>	<b>Result</b>	% R	<b>Control</b> <b>Limits % R</b>	<b>Result</b>	% R	RPD	<b>RPD</b> <b>Limit</b>
67-66-3	Chloroform		0.00	200	2000	2080	104	74 - 124	1960	98	6	30
107-06-2	1,2-Dichloroethane		0.00	200	2000	1890	95	68 - 126	1900	95	0.5	30
127-18-4	Tetrachloroethene		0.00	200	2000	1930	97	70 - 127	1900	95	2	30
75-01-4	Vinyl chloride		0.00	200	2000	1900	95	67 - 131	1830	92	4	30
75-35-4	1,1-Dichloroethene		0.00	200	2000	1980	99	68 - 129	1980	99	0	22
71-43-2	Benzene		0.00	200	2000	2010	101	73 - 128	1990	100	1	21
79-01-6	Trichloroethene		0.00	200	2000	1920	96	78 - 127	1850	93	4	24
108-90-7	Chlorobenzene		0.00	200	2000	2020	101	75 - 121	2000	100	1	21
<b>Surrogate</b>												
460-00-4	4-Bromofluorobenzene				2000	1980	99	62 - 127	1980	99		

# GC/MS Volatiles Quality Control Summary

<b>Analytical Batch</b> 449216 <b>Prep Batch</b> N/A		<b>Client ID</b> B169-ZONE 4-011211-WC <b>GCAL ID</b> 21101140606 <b>Sample Type</b> SAMPLE <b>Analytical Date</b> 01/19/2011 11:42 <b>Matrix</b> Solid	912500MS 913981 MS 01/19/2011 13:14 Solid				912500MSD 913982 MSD 01/19/2011 13:36 Solid			
<b>SW-846 8260B</b>		<b>Units</b> ug/L <b>Result</b> <b>RDL</b>	<b>Spike</b> <b>Added</b>	<b>Result</b>	<b>% R</b>	<b>Control</b> <b>Limits % R</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>RPD</b> <b>Limit</b>
1868-53-7	Dibromofluoromethane		2000	2010	101	65 - 130	1990	100		
2037-26-5	Toluene d8		2000	1890	95	71 - 132	1910	96		
17060-07-0	1,2-Dichloroethane-d4		2000	1900	95	62 - 125	1890	95		

## CHAIN OF CUSTODY RECORD

**GULF COAST ANALYTICAL LABORATORIES, INC**  
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402  
Phone 225.769.4900 • Fax 225.767.5717

Lab use only

PBW

**Client Name**

4482

Client #

212011920

Workorder #

i-21-11

Due Date

[illegible]

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

CCAL-06 11/98

**SAMPLE RECEIVING CHECKLIST**Workorder: 211011920Client: Pastor, Behling, & WheelerReceived by: Raborn, MichelleReceived Date/Time: 1/19/2011 10:30:00 AMSamples Received via: FEDEXNumber of Coolers Received: 1Cooler tracking numbers(s): 8722 9413 7560Cooler temperature(s): 4.1

Were all coolers received at a temperature of 0 - 6° C?

☒ Yes☐ No☐ N/A

Were all custody seals intact?

☒ Yes☐ No☐ N/A

Were all samples received in proper containers?

☒ Yes☐ No☐ N/A

Were all samples properly preserved?

☒ Yes☐ No☐ N/A

Was preservative added to any container at the lab?

☐ Yes☒ No☐ N/A

Were all containers received in good condition?

☒ Yes☐ No☐ N/A

Were all VOA vials received with no head space?

☒ Yes☐ No☐ N/A

Do all sample labels match the Chain of Custody?

☒ Yes☐ No☐ N/A

Was the client notified about any discrepancies?

☐ Yes☐ No☐ N/A

Notes/Comments: \_\_\_\_\_

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# **ANALYTICAL RESULTS**

**PERFORMED BY**

**GULF COAST ANALYTICAL LABORATORIES, INC.**

**7979 GSRI Avenue  
Baton Rouge, LA 70820**

**Report Date** 12/20/2010

**GCAL Report** 210121016



***Deliver To*** Columbia Environmental Services, Inc.  
13222 Reeveston Road  
Houston, TX 77039  
713-400-5651

***Attn*** Tony Maag

***Project*** Gulfco Freeport, TX

## CASE NARRATIVE

**Client:** Columbia Environmental Services, Inc.      **Report:** 210121016

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

### **VOLATILES MASS SPECTROMETRY**

In the SW-846 1311/8260B analysis, a dilution factor of 40 was performed for sample 21012101601 (SOILS IN BERM AREA). The reporting limits are at or below the regulatory limits at this dilution.

In the SW-846 1311/8260B analysis for analytical batch 447304, the MS/MSD exhibited recovery failures. All LCS/LCSD recoveries are acceptable.

### **SEMI-VOLATILES GAS CHROMATOGRAPHY**

In the TX1005 analysis for prep batch 447363, the MS/MSD recoveries and RPD are not applicable due to the high concentration of TPH in the spiked sample. The LCS/LCSD recoveries are acceptable.

### **METALS**

In the SW-846 1311/6010B analysis, sample 21012101601 (SOILS IN BERM AREA) was analyzed at a dilution. The reporting limits are at or below the regulatory limits at this dilution.

In the SW-846 1311/6010B analysis for prep batch 447424, the Sample/Duplicate RPD for Cadmium, Chromium, Lead, Selenium and Silver is not applicable because the sample and/or duplicate concentration is less than five times the reporting limit.

# Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

## Common Abbreviations Utilized in this Report

<b>ND</b>	Indicates the result was Not Detected at the specified RDL
<b>DO</b>	Indicates the result was Diluted Out
<b>MI</b>	Indicates the result was subject to Matrix Interference
<b>TNTC</b>	Indicates the result was Too Numerous To Count
<b>SUBC</b>	Indicates the analysis was Sub-Contracted
<b>FLD</b>	Indicates the analysis was performed in the Field
<b>PQL</b>	Practical Quantitation Limit
<b>MDL</b>	Method Detection Limit
<b>RDL</b>	Reporting Detection Limit
<b>00:00</b>	Reported as a time equivalent to 12:00 AM

## Reporting Flags Utilized in this Report

<b>J</b>	Indicates an estimated value
<b>U</b>	Indicates the compound was analyzed for but not detected
<b>B</b>	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
<b>B</b>	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with [NELAC](#), this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

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Robyn Miguez  
Technical Director  
**GCAL REPORT 210121016**

THIS REPORT CONTAINS \_\_\_\_\_ PAGES.

# Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21012101601	SOILS IN BERM AREA	Solid	12/08/2010 15:00	12/10/2010 08:40
21012101602	PCB TRANSFORMER WASH WATER	Water	12/08/2010 15:00	12/10/2010 08:40

# Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21012101601	SOILS IN BERM AREA	Solid	12/08/2010 15:00	12/10/2010 08:40

## SW-846 6010B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	1.10B	5.00	0.00055	mg/L
7440-43-9	Cadmium	0.0028B	0.050	0.00055	mg/L
7440-02-0	Nickel	0.0076B	0.20	0.0048	mg/L

## TX1005 Hydrocarbons by Range

CAS#	Parameter	Result	RDL	MDL	Units
GCSV-05-02	>C12-C28	384000	50000	4350	ug/Kg
GCSV-05-03	>C28-C35	416000	50000	4350	ug/Kg
GCSV-05-01	C6-C12	24600J	50000	4450	ug/Kg
GCSV-05-04	Total TPH (C6-C35)	825000	50000	4350	ug/Kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21012101601	SOILS IN BERM AREA	Solid	12/08/2010 15:00	12/10/2010 08:40

## SW-846 8260B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			40	12/12/2010 16:31	BKR	447304

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.200U	0.200	0.00656	mg/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	0.00344	mg/L
78-93-3	2-Butanone	0.200U	0.200	0.00373	mg/L
71-43-2	Benzene	0.200U	0.200	0.00217	mg/L
56-23-5	Carbon tetrachloride	0.200U	0.200	0.00592	mg/L
108-90-7	Chlorobenzene	0.200U	0.200	0.00110	mg/L
67-66-3	Chloroform	0.200U	0.200	0.00226	mg/L
127-18-4	Tetrachloroethene	0.200U	0.200	0.00484	mg/L
79-01-6	Trichloroethene	0.200U	0.200	0.00247	mg/L
75-01-4	Vinyl chloride	0.200U	0.200	0.00372	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2000	2080	ug/L	104	62 - 130
1868-53-7	Dibromofluoromethane	2000	2050	ug/L	103	65 - 127
2037-26-5	Toluene d8	2000	2080	ug/L	104	71 - 134
17060-07-0	1,2-Dichloroethane-d4	2000	2110	ug/L	106	62 - 127

## SW-846 8270C TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
12/14/2010 08:53	447409	3510C	1	12/14/2010 19:31	JEW	447429

CAS#	Parameter	Result	RDL	MDL	Units
106-46-7	1,4-Dichlorobenzene	0.0500U	0.0500	0.0006	mg/L
95-95-4	2,4,5-Trichlorophenol	0.0500U	0.0500	0.0006	mg/L
88-06-2	2,4,6-Trichlorophenol	0.0500U	0.0500	0.0008	mg/L
121-14-2	2,4-Dinitrotoluene	0.0500U	0.0500	0.0012	mg/L
1319-77-3	Cresols	0.1000U	0.1000	0.0024	mg/L
118-74-1	Hexachlorobenzene	0.0500U	0.0500	0.0013	mg/L
87-68-3	Hexachlorobutadiene	0.0500U	0.0500	0.0011	mg/L
67-72-1	Hexachloroethane	0.0500U	0.0500	0.0055	mg/L
98-95-3	Nitrobenzene	0.0500U	0.0500	0.0011	mg/L
87-86-5	Pentachlorophenol	0.2500U	0.2500	0.0076	mg/L
110-86-1	Pyridine	0.0500U	0.0500	0.0077	mg/L
1319-77-3MP	m,p-Cresol	0.0500U	0.0500	0.0017	mg/L
95-48-7	o-Cresol	0.0500U	0.0500	0.0009	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	250	212	ug/L	85	48 - 123
321-60-8	2-Fluorobiphenyl	250	213	ug/L	85	16 - 128
1718-51-0	Terphenyl-d14	250	189	ug/L	76	38 - 167
4165-62-2	Phenol-d5	500	183	ug/L	37	10 - 123
367-12-4	2-Fluorophenol	500	271	ug/L	54	10 - 120
118-79-6	2,4,6-Tribromophenol	500	370	ug/L	74	44 - 121

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21012101601	SOILS IN BERM AREA	Solid	12/08/2010 15:00	12/10/2010 08:40

## TX1005 Hydrocarbons by Range

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
12/14/2010 11:00	447363	TNRCC 1005	1	12/16/2010 18:18	SMH	447615

CAS#	Parameter	Result	RDL	MDL	Units
GCSV-05-02	>C12-C28	384000	50000	4350	ug/Kg
GCSV-05-03	>C28-C35	416000	50000	4350	ug/Kg
GCSV-05-01	C6-C12	24600J	50000	4450	ug/Kg
GCSV-05-04	Total TPH (C6-C35)	825000	50000	4350	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
84-15-1	o-Terphenyl	50000	44500	ug/Kg	89	58 - 148

## SW-846 6010B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
12/14/2010 10:35	447424	SW-846 3010A	5	12/15/2010 18:09	AJW	447501

CAS#	Parameter	Result	RDL	MDL	Units
7440-36-0	Antimony	0.30U	0.30	0.020	mg/L
7440-38-2	Arsenic	1.00U	1.00	0.013	mg/L
7440-39-3	Barium	1.10B	5.00	0.00055	mg/L
7440-43-9	Cadmium	0.0028B	0.050	0.00055	mg/L
7440-47-3	Chromium	0.25U	0.25	0.0017	mg/L
7440-50-8	Copper	0.10U	0.10	0.0069	mg/L
7439-92-1	Lead	0.50U	0.50	0.0070	mg/L
7440-02-0	Nickel	0.0076B	0.20	0.0048	mg/L
7782-49-2	Selenium	0.50U	0.50	0.022	mg/L
7440-22-4	Silver	0.25U	0.25	0.0030	mg/L

## SW-846 7470A TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
12/14/2010 10:35	447425	SW-846 7470A	1	12/15/2010 15:04	AJW	447395

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0020U	0.0020	0.000081	mg/L

## SW-846 9012A Reactivity CN

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
12/10/2010 14:00	447140	7.3.3.2	1	12/10/2010 16:35	AEL	447274

CAS#	Parameter	Result	RDL	MDL	Units
57-12-5R	Reactivity Cyanide	250U	250	250	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21012101601	SOILS IN BERM AREA	Solid	12/08/2010 15:00	12/10/2010 08:40

## SW-846 9034 Reactivity Sulfide

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
12/10/2010 14:00	447141	Sec 7.3.4.2	1	12/13/2010 11:25	JEM	447342

CAS#	Parameter	Result	RDL	MDL	Units
18496-25-8R	Reactivity Sulfide	80U	80	80	mg/kg

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21012101602	PCB TRANSFORMER WASH WATER	Water	12/08/2010 15:00	12/10/2010 08:40

SW-846 8082A

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
12/15/2010 10:55	447353	3510C	1	12/15/2010 21:00	TLS	447536

CAS#	Parameter	Result	RDL	MDL	Units
12674-11-2	Aroclor-1016	1.28U	1.28	0.431	ug/L
11104-28-2	Aroclor-1221	1.28U	1.28	0.285	ug/L
11141-16-5	Aroclor-1232	1.28U	1.28	0.129	ug/L
53469-21-9	Aroclor-1242	1.28U	1.28	0.217	ug/L
12672-29-6	Aroclor-1248	1.28U	1.28	0.131	ug/L
11097-69-1	Aroclor-1254	1.28U	1.28	0.110	ug/L
11096-82-5	Aroclor-1260	1.28U	1.28	0.338	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
2051-24-3	Decachlorobiphenyl	.641	.194	ug/L	30	30 - 139

# GC/MS Volatiles Quality Control Summary

Analytical Batch 447304 Prep Batch N/A		Client ID MB447304 GCAL ID 904859 Sample Type Method Blank Analytical Date 12/12/2010 15:21 Matrix Water			LCS447304 904860 LCS 12/12/2010 14:10 Water			LCSD447304 904861 LCSD 12/12/2010 14:37 Water			
<b>SW-846 8260B TCLP</b>		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
56-23-5	Carbon tetrachloride	0.00500U	0.00500	0.050	0.057	114	76 - 128	0.056	111	2	30
67-66-3	Chloroform	0.00500U	0.00500	0.050	0.053	106	75 - 122	0.052	103	2	30
107-06-2	1,2-Dichloroethane	0.00500U	0.00500	0.050	0.050	100	71 - 129	0.050	101	0	30
78-93-3	2-Butanone	0.00500U	0.00500	0.050	0.039	79	58 - 137	0.046	91	16	30
127-18-4	Tetrachloroethene	0.00500U	0.00500	0.050	0.051	101	68 - 128	0.049	97	4	30
75-01-4	Vinyl chloride	0.00500U	0.00500	0.050	0.047	94	68 - 132	0.044	88	7	30
75-35-4	1,1-Dichloroethene	0.00500U	0.00500	0.050	0.052	105	69 - 129	0.050	99	4	20
71-43-2	Benzene	0.00500U	0.00500	0.050	0.050	100	70 - 129	0.048	96	4	20
79-01-6	Trichloroethene	0.00500U	0.00500	0.050	0.055	109	76 - 129	0.050	101	10	20
108-90-7	Chlorobenzene	0.00500U	0.00500	0.050	0.048	97	74 - 123	0.048	96	0	20
<b>Surrogate</b>											
460-00-4	4-Bromofluorobenzene	50.5	101	50	51.5	103	62 - 130	51.7	103		
1868-53-7	Dibromofluoromethane	52.2	104	50	54.5	109	65 - 127	53.1	106		
2037-26-5	Toluene d8	52.1	104	50	48.1	96	71 - 134	48.2	96		
17060-07-0	1,2-Dichloroethane-d4	52.8	106	50	53	106	62 - 127	51.9	104		

Analytical Batch 447304 Prep Batch N/A		Client ID SOILS IN BERM AREA GCAL ID 21012101601 Sample Type SAMPLE Analytical Date 12/12/2010 16:31 Matrix Solid			904485MS 904862 MS 12/12/2010 17:59 Solid			904485MSD 904863 MSD 12/12/2010 18:21 Solid			
<b>SW-846 8260B TCLP</b>		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
56-23-5	Carbon tetrachloride	0.00	0.200	2.00	2.26	113	76 - 128	2.15	108	5	30
67-66-3	Chloroform	0.00	0.200	2.00	2.17	109	75 - 122	2.05	103	6	30
107-06-2	1,2-Dichloroethane	0.00	0.200	2.00	2.01	101	71 - 129	1.97	99	2	30
78-93-3	2-Butanone	0.00	0.200	2.00	1.60	80	58 - 137	1.64	82	2	30
127-18-4	Tetrachloroethene	0.00	0.200	2.00	2.05	103	68 - 128	1.91	96	7	30
75-01-4	Vinyl chloride	0.00	0.200	2.00	0.501	25*	68 - 132	0.494	25*	1	30
75-35-4	1,1-Dichloroethene	0.00	0.200	2.00	1.68	84	69 - 129	1.56	78	7	30
71-43-2	Benzene	0.00	0.200	2.00	1.99	100	70 - 129	1.89	95	5	30
79-01-6	Trichloroethene	0.00	0.200	2.00	2.12	106	76 - 129	2.03	102	4	30

# GC/MS Volatiles Quality Control Summary

<b>Analytical Batch</b> 447304 <b>Prep Batch</b> N/A		<b>Client ID</b> <b>GCAL ID</b> <b>Sample Type</b> <b>Analytical Date</b> <b>Matrix</b>		SOILS IN BERM AREA 21012101601 SAMPLE 12/12/2010 16:31 Solid			904485MS 904862 MS 12/12/2010 17:59 Solid			904485MSD 904863 MSD 12/12/2010 18:21 Solid			
<b>SW-846 8260B TCLP</b>				<b>Units</b>	mg/L	<b>Spike</b>	<b>Result</b>	<b>% R</b>	<b>Control</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>RPD</b>
				<b>Result</b>	<b>RDL</b>	<b>Added</b>			<b>Limits % R</b>				
108-90-7	Chlorobenzene			0.00	0.200	2.00	1.97	99	74 - 123	1.90	95	4	30
<b>Surrogate</b>													
460-00-4	4-Bromofluorobenzene			2080	104	2000	2070	104	62 - 130	2060	103		
1868-53-7	Dibromofluoromethane			2050	103	2000	2100	105	65 - 127	2050	103		
2037-26-5	Toluene d8			2080	104	2000	1940	97	71 - 134	1940	97		
17060-07-0	1,2-Dichloroethane-d4			2110	106	2000	2080	104	62 - 127	2050	103		

# GC/MS Semi-Volatiles Quality Control Summary

<b>Analytical Batch</b> 447429 <b>Prep Batch</b> 447409 <b>Prep Method</b> 3510C		<b>Client ID</b> MB447409 <b>GCAL ID</b> 905357 <b>Sample Type</b> Method Blank <b>Prep Date</b> 12/14/2010 08:53 <b>Analytical Date</b> 12/14/2010 17:00 <b>Matrix</b> Water	<b>LCS447409</b> 905358 LCS 12/14/2010 08:53 12/14/2010 17:15 Water					<b>LCSD447409</b> 905359 LCSD 12/14/2010 08:53 12/14/2010 17:31 Water			
SW-846 8270C TCLP		Units	mg/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
		Result	RDL	Added			Limits % R				Limit
118-74-1	Hexachlorobenzene	0.0500U	0.0500	0.100	0.069	69	61 - 120	0.069	69	0	30
87-68-3	Hexachlorobutadiene	0.0500U	0.0500	0.100	0.066	66	17 - 120	0.067	67	2	30
67-72-1	Hexachloroethane	0.0500U	0.0500	0.100	0.062	62	21 - 120	0.065	65	5	30
95-48-7	o-Cresol	0.0500U	0.0500	0.100	0.053	53	31 - 125	0.055	55	4	30
98-95-3	Nitrobenzene	0.0500U	0.0500	0.100	0.069	69	53 - 120	0.069	69	0	30
95-95-4	2,4,5-Trichlorophenol	0.0500U	0.0500	0.100	0.066	66	60 - 120	0.067	67	2	30
88-06-2	2,4,6-Trichlorophenol	0.0500U	0.0500	0.100	0.063	63	59 - 120	0.066	66	5	30
110-86-1	Pyridine	0.0500U	0.0500	0.100	0.037	37	10 - 120	0.040	40	8	30
1319-77-3	Cresols	0.1000U	0.1000	0.200	0.098	49	24 - 125	0.101	51	3	30
1319-77-3MP	m,p-Cresol	0.0500U	0.0500	0.100	0.043	43	24 - 125	0.045	45	5	30
106-46-7	1,4-Dichlorobenzene	0.0500U	0.0500	0.100	0.066	66	22 - 120	0.068	68	3	30
121-14-2	2,4-Dinitrotoluene	0.0500U	0.0500	0.100	0.066	66	37 - 138	0.068	68	3	30
87-86-5	Pentachlorophenol	0.2500U	0.2500	0.100	0.058	58	25 - 158	0.057	57	2	30
<b>Surrogate</b>											
4165-60-0	Nitrobenzene-d5	35.7	71	50	39.9	80	48 - 123	41.2	82		
321-60-8	2-Fluorobiphenyl	36.7	73	50	42	84	16 - 128	44.2	88		
1718-51-0	Terphenyl-d14	38.3	77	50	40.8	82	38 - 167	41.9	84		
4165-62-2	Phenol-d5	33	33	100	36.5	37	10 - 123	38.1	38		
367-12-4	2-Fluorophenol	47	47	100	54.6	55	10 - 120	56.2	56		
118-79-6	2,4,6-Tribromophenol	58.9	59	100	68.6	69	44 - 121	72	72		

<b>Analytical Batch</b> 447429 <b>Prep Batch</b> 447409 <b>Prep Method</b> 3510C		<b>Client ID</b> SOILS IN BERM AREA <b>GCAL ID</b> 21012101601 <b>Sample Type</b> SAMPLE <b>Prep Date</b> 12/14/2010 08:53 <b>Analytical Date</b> 12/14/2010 19:31 <b>Matrix</b> Solid	<b>904485MS</b> 905500 MS 12/14/2010 08:53 12/14/2010 19:46 Solid					<b>904485MSD</b> 905501 MSD 12/14/2010 08:53 12/14/2010 20:01 Solid			
SW-846 8270C TCLP		Units	mg/L	Spike	Result	% R	Control	Result	% R	RPD	RPD
		Result	RDL	Added			Limits % R				Limit
118-74-1	Hexachlorobenzene	0.00	0.0500	0.500	0.345	69	61 - 120	0.381	76	10	30
87-68-3	Hexachlorobutadiene	0.00	0.0500	0.500	0.323	65	17 - 120	0.344	69	6	30

# GC/MS Semi-Volatiles Quality Control Summary

<b>Analytical Batch</b> 447429 <b>Prep Batch</b> 447409 <b>Prep Method</b> 3510C		<b>Client ID</b> <b>GCAL ID</b> 21012101601 <b>Sample Type</b> SAMPLE <b>Prep Date</b> 12/14/2010 08:53 <b>Analytical Date</b> 12/14/2010 19:31 <b>Matrix</b> Solid		SOILS IN BERM AREA			904485MS 905500 MS 12/14/2010 08:53 12/14/2010 19:46 Solid		904485MSD 905501 MSD 12/14/2010 08:53 12/14/2010 20:01 Solid				
<b>SW-846 8270C TCLP</b>				<b>Units</b>	mg/L	<b>Spike</b>	<b>Result</b>	<b>% R</b>	<b>Control</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>RPD</b>
				<b>Result</b>	<b>RDL</b>	<b>Added</b>			<b>Limits % R</b>			<b>Limit</b>	
67-72-1	Hexachloroethane	0.00	0.0500	0.500	0.334	67	21 - 120	0.354	71	6	30		
95-48-7	o-Cresol	0.00	0.0500	0.500	0.271	54	31 - 125	0.304	61	11	30		
98-95-3	Nitrobenzene	0.00	0.0500	0.500	0.357	71	53 - 120	0.380	76	6	30		
95-95-4	2,4,5-Trichlorophenol	0.00	0.0500	0.500	0.348	70	60 - 120	0.378	76	8	30		
88-06-2	2,4,6-Trichlorophenol	0.00	0.0500	0.500	0.332	66	59 - 120	0.358	72	8	30		
110-86-1	Pyridine	0.00	0.0500	0.500	0.242	48	10 - 120	0.250	50	3	30		
1319-77-3	Cresols	0.00	0.1000	1.00	0.511	51	24 - 125	0.574	57	12	30		
1319-77-3MP	m,p-Cresol	0.00	0.0500	0.500	0.232	46	24 - 125	0.263	53	13	30		
106-46-7	1,4-Dichlorobenzene	0.00	0.0500	0.500	0.337	67	22 - 120	0.356	71	5	30		
121-14-2	2,4-Dinitrotoluene	0.00	0.0500	0.500	0.373	75	37 - 138	0.393	79	5	30		
87-86-5	Pentachlorophenol	0.00	0.2500	0.500	0.316	63	25 - 158	0.339	68	7	30		
<b>Surrogate</b>													
4165-60-0	Nitrobenzene-d5	212	85	250	208	83	48 - 123	201	80				
321-60-8	2-Fluorobiphenyl	213	85	250	216	86	16 - 128	210	84				
1718-51-0	Terphenyl-d14	189	76	250	197	79	38 - 167	195	78				
4165-62-2	Phenol-d5	183	37	500	186	37	10 - 123	179	36				
367-12-4	2-Fluorophenol	271	54	500	269	54	10 - 120	263	53				
118-79-6	2,4,6-Tribromophenol	370	74	500	382	76	44 - 121	351	70				

# General Chromatography Quality Control Summary

<b>Analytical Batch</b> 447536 <b>Prep Batch</b> 447353 <b>Prep Method</b> 3510C		<b>Client ID</b> MB447353 <b>GCAL ID</b> 905060 <b>Sample Type</b> Method Blank <b>Prep Date</b> 12/15/2010 10:55 <b>Analytical Date</b> 12/15/2010 20:05 <b>Matrix</b> Water		<b>LCS447353</b> 905061 LCS 12/15/2010 10:55 12/15/2010 20:23 Water			<b>LCSD447353</b> 905062 LCSD 12/15/2010 10:55 12/15/2010 20:42 Water						
<b>SW-846 8082A</b>				<b>Units</b> <b>Result</b>	ug/L <b>RDL</b>	<b>Spike</b> <b>Added</b>	<b>Result</b>	<b>% R</b>	<b>Control</b> <b>Limits % R</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>RPD</b> <b>Limit</b>
11104-28-2 Aroclor-1221				1.00U	1.00								
11141-16-5 Aroclor-1232				1.00U	1.00								
53469-21-9 Aroclor-1242				1.00U	1.00								
12672-29-6 Aroclor-1248				1.00U	1.00								
11097-69-1 Aroclor-1254				1.00U	1.00								
12674-11-2 Aroclor-1016				1.00U	1.00	4.00	3.65	91	57 - 130	4.13	103	12	35
11096-82-5 Aroclor-1260				1.00U	1.00	4.00	3.64	91	55 - 130	4.05	101	11	34
<b>Surrogate</b>													
2051-24-3 Decachlorobiphenyl				.336	67	.5	.351	70	30 - 139	.319	64		

# General Chromatography Quality Control Summary

<b>Analytical Batch</b> 447615 <b>Prep Batch</b> 447363 <b>Prep Method</b> TNRCC 1005		<b>Client ID</b> MB447363 <b>GCAL ID</b> 905166 <b>Sample Type</b> Method Blank <b>Prep Date</b> 12/14/2010 11:00 <b>Analytical Date</b> 12/16/2010 14:46 <b>Matrix</b> Solid		<b>LCS447363</b> 905167 LCS 12/14/2010 11:00 12/16/2010 15:20 Solid			<b>LCSD447363</b> 905168 LCSD 12/14/2010 11:00 12/16/2010 15:56 Solid						
<b>TX1005 Hydrocarbons by Range</b>				<b>Units</b> <b>Result</b>	<b>ug/Kg</b> <b>RDL</b>	<b>Spike</b> <b>Added</b>	<b>Result</b>	<b>% R</b>	<b>Control</b> <b>Limits % R</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>RPD</b> <b>Limit</b>
GCSV-05-01 C6-C12				50000U	50000	198000	190000	96	75 - 125	182000	91	4	20
GCSV-05-02 >C12-C28				50000U	50000								
GCSV-05-03 >C28-C35				50000U	50000								
GCSV-05-04 Total TPH (C6-C35)				50000U	50000								
<b>Surrogate</b>													
84-15-1 o-Terphenyl				40800	82	49500	49000	99	58 - 148	40200	80		

<b>Analytical Batch</b> 447615 <b>Prep Batch</b> 447363 <b>Prep Method</b> TNRCC 1005		<b>Client ID</b> SOILS IN BERM AREA <b>GCAL ID</b> 21012101601 <b>Sample Type</b> SAMPLE <b>Prep Date</b> 12/14/2010 11:00 <b>Analytical Date</b> 12/16/2010 18:18 <b>Matrix</b> Solid	904485MS 905169 MS 12/14/2010 11:00 12/16/2010 18:54 Solid				904485MSD 905170 MSD 12/14/2010 11:00 12/16/2010 19:28 Solid					
TX1005 Hydrocarbons by Range			Units Result	ug/Kg RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
GCSV-05-04    Total TPH (C6-C35)			825000	50000	200000	1390000	284*	75 - 125	1090000	132*	24*	20
<b>Surrogate</b>												
84-15-1        o-Terphenyl			44500	89	50000	42400	85	58 - 148	42700	85		

# Inorganics Quality Control Summary

<b>Analytical Batch</b> 447501 <b>Prep Batch</b> 447424 <b>Prep Method</b> SW-846 3010A		<b>Client ID</b> MB447424 <b>GCAL ID</b> 905406 <b>Sample Type</b> Method Blank <b>Prep Date</b> 12/14/2010 10:35 <b>Analytical Date</b> 12/15/2010 16:42 <b>Matrix</b> Water	LCS447424 905407 LCS 12/14/2010 10:35 12/15/2010 16:49 Water				
SW-846 6010B TCLP		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
7440-36-0	Antimony	0.060U	0.060	0.50	0.49	99	80 - 120
7440-38-2	Arsenic	0.20U	0.20	0.50	0.51	102	80 - 120
7440-39-3	Barium	0.081B	1.00	0.50	0.57	115	80 - 120
7440-43-9	Cadmium	0.00028B	0.010	0.50	0.49	99	80 - 120
7440-47-3	Chromium	0.0019B	0.050	0.50	0.47	95	80 - 120
7440-50-8	Copper	0.0035B	0.020	0.50	0.51	102	80 - 120
7439-92-1	Lead	0.0059B	0.10	0.50	0.49	98	80 - 120
7440-02-0	Nickel	0.0021B	0.040	0.50	0.47	95	80 - 120
7782-49-2	Selenium	0.015B	0.10	0.50	0.56	111	80 - 120
7440-22-4	Silver	0.0017B	0.050	0.50	0.49	98	80 - 120

<b>Analytical Batch</b> 447501 <b>Prep Batch</b> 447424 <b>Prep Method</b> SW-846 3010A		<b>Client ID</b> HAZ BARGE CLEANING SOLIDS <b>GCAL ID</b> 21012131101 <b>Sample Type</b> SAMPLE <b>Prep Date</b> 12/14/2010 10:35 <b>Analytical Date</b> 12/15/2010 16:56 <b>Matrix</b> Solid	905123MS 905409 MS 12/14/2010 10:35 12/15/2010 17:10 Solid				
SW-846 6010B TCLP		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
7440-36-0	Antimony	0.0	0.30	0.50	0.48	97	75 - 125
7440-38-2	Arsenic	0.0	1.00	0.50	0.50	101	75 - 125
7440-39-3	Barium	0.44	5.00	0.50	0.96	102	75 - 125
7440-43-9	Cadmium	0.0010	0.050	0.50	0.51	101	75 - 125
7440-47-3	Chromium	0.0	0.25	0.50	0.50	100	75 - 125
7440-50-8	Copper	0.0	0.10	0.50	0.52	103	75 - 125
7439-92-1	Lead	0.015	0.50	0.50	0.51	99	75 - 125
7440-02-0	Nickel	0.37	0.20	0.50	0.89	104	75 - 125
7782-49-2	Selenium	0.0095	0.50	0.50	0.51	100	75 - 125
7440-22-4	Silver	0.0072	0.25	0.50	0.50	98	75 - 125

# Inorganics Quality Control Summary

<b>Analytical Batch</b> 447501 <b>Prep Batch</b> 447424 <b>Prep Method</b> SW-846 3010A		<b>Client ID</b> <b>GCAL ID</b> 21012131101 <b>Sample Type</b> SAMPLE <b>Prep Date</b> 12/14/2010 10:35 <b>Analytical Date</b> 12/15/2010 16:56 <b>Matrix</b> Solid	HAZ BARGE CLEANING SOLIDS 905123DUP 905408 DUP 12/14/2010 10:35 12/15/2010 17:03 Solid			
SW-846 6010B TCLP		Units Result	mg/L RDL	Result	RPD	RPD Limit
7440-36-0	Antimony	0.0	0.30	0.0	0	20
7440-38-2	Arsenic	0.0	1.00	0.0	0	20
7440-39-3	Barium	0.44	5.00	0.46	4	20
7440-43-9	Cadmium	0.0010	0.050	0.00012	157*	20
7440-47-3	Chromium	0.0	0.25	0.0027	200*	20
7440-50-8	Copper	0.0	0.10	0.0	0	20
7439-92-1	Lead	0.015	0.50	0.0059	87*	20
7440-02-0	Nickel	0.37	0.20	0.39	5	20
7782-49-2	Selenium	0.0095	0.50	0.0	200*	20
7440-22-4	Silver	0.0072	0.25	0.0023	103*	20

# Inorganics Quality Control Summary

<b>Analytical Batch</b> 447395 <b>Prep Batch</b> 447425 <b>Prep Method</b> SW-846 7470A	<b>Client ID</b> <b>GCAL ID</b> <b>Sample Type</b> <b>Prep Date</b> <b>Analytical Date</b> <b>Matrix</b>	MB447425 905411 Method Blank 12/14/2010 10:35 12/15/2010 14:47 Water			LCS447425 905412 LCS 12/14/2010 10:35 12/15/2010 14:52 Water		
<b>SW-846 7470A TCLP</b>		<b>Units</b>	mg/L	<b>Spike</b>	<b>Result</b>		<b>Control</b>
		<b>Result</b>	<b>RDL</b>	<b>Added</b>		<b>% R</b>	<b>Limits % R</b>
7439-97-6 Mercury		0.0020U	0.0020	0.00500	0.00512	102	80 - 120

<b>Analytical Batch</b> 447395 <b>Prep Batch</b> 447425 <b>Prep Method</b> SW-846 7470A	<b>Client ID</b> <b>GCAL ID</b> <b>Sample Type</b> <b>Prep Date</b> <b>Analytical Date</b> <b>Matrix</b>	HAZ BARGE CLEANING SOLIDS 21012131101 SAMPLE 12/14/2010 10:35 12/15/2010 14:53 Solid			905123MS 905414 MS 12/14/2010 10:35 12/15/2010 14:56 Solid		
<b>SW-846 7470A TCLP</b>		<b>Units</b> <b>Result</b>	mg/L <b>RDL</b>	<b>Spike</b> <b>Added</b>	<b>Result</b>	<b>% R</b>	<b>Control</b> <b>Limits % R</b>
7439-97-6 Mercury		0.00000	0.0020	0.00500	0.00532	106	75 - 125

<b>Analytical Batch</b> 447395 <b>Prep Batch</b> 447425 <b>Prep Method</b> SW-846 7470A	<b>Client ID</b> <b>GCAL ID</b> <b>Sample Type</b> <b>Prep Date</b> <b>Analytical Date</b> <b>Matrix</b>	HAZ BARGE CLEANING SOLIDS 21012131101 SAMPLE 12/14/2010 10:35 12/15/2010 14:53 Solid	905123DUP 905413 DUP 12/14/2010 10:35 12/15/2010 14:55 Solid		
<b>SW-846 7470A TCLP</b>		<b>Units</b> mg/L <b>Result</b> <b>RDL</b>	<b>Result</b>	<b>RPD</b>	<b>RPD</b> <b>Limit</b>
7439-97-6 Mercury		0.00000 0.0020	0.00000	0	20

# General Chemistry Quality Control Summary

<b>Analytical Batch</b> 447274 <b>Prep Batch</b> 447140 <b>Prep Method</b> 7.3.3.2	<b>Client ID</b> MB447140 <b>GCAL ID</b> 903952 <b>Sample Type</b> Method Blank <b>Prep Date</b> 12/10/2010 14:00 <b>Analytical Date</b> 12/10/2010 16:25 <b>Matrix</b> Solid	LCS447140 903953 LCS 12/10/2010 14:00 12/10/2010 16:26 Solid				
<b>SW-846 9012A Reactivity CN</b>		<b>Units</b> mg/kg <b>Result</b> RDL	<b>Spike</b> <b>Added</b>	<b>Result</b>	<b>% R</b>	<b>Control</b> <b>Limits % R</b>
57-12-5R	Reactivity Cyanide	250U 250	250	25.6	10	1 - 25

<b>Analytical Batch</b> 447274 <b>Prep Batch</b> 447140 <b>Prep Method</b> 7.3.3.2	<b>Client ID</b> GPT-120710-PM-001 <b>GCAL ID</b> 21012084002 <b>Sample Type</b> SAMPLE <b>Prep Date</b> 12/10/2010 14:00 <b>Analytical Date</b> 12/10/2010 16:33 <b>Matrix</b> Solid	903884DUP 903954 DUP 12/10/2010 14:00 12/10/2010 16:34 Solid			
<b>SW-846 9012A Reactivity CN</b>		<b>Units</b> mg/kg <b>Result</b> RDL	<b>Result</b>	<b>RPD</b>	<b>RPD</b> <b>Limit</b>
57-12-5R	Reactivity Cyanide	0.0000 250	0.0000	0	25

# General Chemistry Quality Control Summary

<div>Analytical Batch 447342</div> <div>Prep Batch 447141</div> <div>Prep Method Sec 7.3.4.2</div>	<div>Client ID</div> <div>GCAL ID</div> <div>Sample Type</div> <div>Prep Date</div> <div>Analytical Date</div> <div>Matrix</div>	<div>MB447141</div> <div>903955</div> <div>Method Blank</div> <div>12/10/2010 14:00</div> <div>12/13/2010 11:25</div> <div>Solid</div>	<div>LCS447141</div> <div>903956</div> <div>LCS</div> <div>12/10/2010 14:00</div> <div>12/13/2010 11:25</div> <div>Solid</div>				
<div>SW-846 9034 Reactivity Sulfide</div>		<div>Units</div> <div>Result</div>	<div>mg/kg</div> <div>RDL</div>	<div>Spike</div> <div>Added</div>	<div>Result</div>	<div>% R</div>	<div>Control</div> <div>Limits % R</div>
<div>18496-25-8R    Reactivity Sulfide</div>		<div>80U</div>	<div>80</div>	<div>537</div>	<div>417</div>	<div>77.7</div>	<div>20 - 114</div>

<b>Analytical Batch</b> 447342 <b>Prep Batch</b> 447141 <b>Prep Method</b> Sec 7.3.4.2	<b>Client ID</b> <b>GCAL ID</b> <b>Sample Type</b> <b>Prep Date</b> <b>Analytical Date</b> <b>Matrix</b>	GPT-120710-PM-001 21012084002 SAMPLE 12/10/2010 14:00 12/13/2010 11:25 Solid	903884DUP 903957 DUP 12/10/2010 14:00 12/13/2010 11:25 Solid			
<b>SW-846 9034 Reactivity Sulfide</b>		<b>Units</b> <b>Result</b>	mg/kg RDL	<b>Result</b>	<b>RPD</b>	<b>RPD Limit</b>
18496-25-8R     Reactivity Sulfide		0	80	0	0	25



Lab use only			
Columbia	9242	210121016	1221-10
Client Name	Client #	Group#	Due Date

Matrix: W = water, S=Soil, SD=Solid, L=Liquid, SL=Sludge, O=Oil, CT=Charcoal Tube, OVM=Organic Vapor Monitor, XT=XAD Tube, A=Air Bag, SUM=Summa Canister

# ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

**Report Date** 04/28/2010

**GCAL Report** 210041229



***Deliver To*** Columbia Environmental Services, Inc.  
13222 Reeveston Road  
Houston, TX 77039  
713-400-5651

***Attn*** Tony Maag

***Project*** Gulfco Marine

## CASE NARRATIVE

**Client:** Columbia Environmental Services, Inc      **Report:** 210041229

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

### **VOLATILES MASS SPECTROMETRY**

In the SW-846 1311/8260B analysis, samples 21004122901 (T2), 21004122903 (T6), 21004122904 (T6 MS), 21004122905 (T6 MSD), 21004122906 (T13), 21004122909 (T18), 21004122910 (T19), and 21004122911 (T21) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument. The dilutions are reflected in elevated reporting limits that have been lowered when necessary to meet the regulatory limit. The reporting limit exceeds the regulatory limit for vinyl chloride for sample 21004122911 (T21).

In the SW-846 1311/8260B analysis, a dilution factor of 40 was performed for samples 21004122902 (T4), 21004122907 (T15), 21004122908 (T16) and 21004122912 (T22). The reporting limits are at or below the regulatory limits at this dilution.

In the SW-846 1311/8260B analysis for analytical batch 429573, the MS/MSD exhibited recovery failures. All LCS/LCSD recoveries and RPDs are acceptable.

### **SEMI-VOLATILES GAS CHROMATOGRAPHY**

In the TX 1005 analysis, sample 21004122908 (T16) had to be diluted to bracket target ranges within the calibration range of the instrument. This is reflected in elevated detection limits. The recovery for the surrogate is above the upper control limit. This can be attributed to a matrix interference as the surrogate eluted within the diesel "hump" of the chromatogram.

### **CONVENTIONALS**

The Flashpoint analysis for samples 21004122907 (T15), 21004122909 (T18), 21004122910 (T19), and 21004122912 (T22) was performed by SW-846 Method 1010. The matrix is identified as a solid; while solid samples do not fall within the scope of this method, these samples are liquids.

# Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

## Common Abbreviations Utilized in this Report

<b>ND</b>	Indicates the result was Not Detected at the specified RDL
<b>DO</b>	Indicates the result was Diluted Out
<b>MI</b>	Indicates the result was subject to Matrix Interference
<b>TNTC</b>	Indicates the result was Too Numerous To Count
<b>SUBC</b>	Indicates the analysis was Sub-Contracted
<b>FLD</b>	Indicates the analysis was performed in the Field
<b>PQL</b>	Practical Quantitation Limit
<b>MDL</b>	Method Detection Limit
<b>RDL</b>	Reporting Detection Limit
<b>00:00</b>	Reported as a time equivalent to 12:00 AM

## Reporting Flags Utilized in this Report

<b>J</b>	Indicates an estimated value
<b>U</b>	Indicates the compound was analyzed for but not detected
<b>B</b>	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
<b>B</b>	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with [ISO Guide 25](#) and [NELAC](#), this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

---

Robyn Miguez  
Technical Director  
**GCAL REPORT 210041229**

THIS REPORT CONTAINS \_\_\_\_\_ PAGES.

# Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122901	T2	Water	04/06/2010 12:00	04/09/2010 12:06
21004122902	T4	Water	04/06/2010 15:00	04/09/2010 12:06
21004122903	T6	Water	04/06/2010 16:00	04/09/2010 12:06
21004122904	T6 MS	Water	04/06/2010 16:00	04/09/2010 12:06
21004122905	T6 MSD	Water	04/06/2010 16:00	04/09/2010 12:06
21004122906	T13	Solid	04/07/2010 11:00	04/09/2010 12:06
21004122907	T15	Solid	04/07/2010 16:00	04/09/2010 12:06
21004122908	T16	Water	04/07/2010 12:00	04/09/2010 12:06
21004122909	T18	Solid	04/07/2010 10:00	04/09/2010 12:06
21004122910	T19	Solid	04/07/2010 13:00	04/09/2010 12:06
21004122911	T21	Water	04/07/2010 15:00	04/09/2010 12:06
21004122912	T22	Solid	04/07/2010 10:15	04/09/2010 12:06

# Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122901	T2	Water	04/06/2010 12:00	04/09/2010 12:06

## SW-846 8260B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	28.9	0.200	0.017	mg/L
78-93-3	2-Butanone	5.64	5.00	0.019	mg/L
71-43-2	Benzene	2.43	0.200	0.011	mg/L
67-66-3	Chloroform	1.25	1.00	0.011	mg/L
127-18-4	Tetrachloroethene	0.534	0.200	0.024	mg/L
79-01-6	Trichloroethene	12.7	0.200	0.012	mg/L

## SW-846 6010B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.020B	0.20	0.0030	mg/L
7440-39-3	Barium	16.8	1.00	0.00031	mg/L
7440-47-3	Chromium	0.013B	0.050	0.00032	mg/L
7782-49-2	Selenium	0.0061B	0.10	0.0037	mg/L

## SW-846 7470A TCLP

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00067B	0.020	0.00055	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122902	T4	Water	04/06/2010 15:00	04/09/2010 12:06

## SW-846 6010B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
7440-36-0	Antimony	0.020B	0.060	0.0035	mg/L
7440-38-2	Arsenic	0.0030B	0.20	0.0030	mg/L
7440-39-3	Barium	13.1	1.00	0.00031	mg/L
7440-02-0	Nickel	0.038B	0.040	0.0012	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122903	T6	Water	04/06/2010 16:00	04/09/2010 12:06

## SW-846 8260B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	6.91	0.500	0.00860	mg/L
71-43-2	Benzene	0.802	0.500	0.00542	mg/L
67-66-3	Chloroform	5.36	0.500	0.00565	mg/L
79-01-6	Trichloroethene	0.245J	0.500	0.00618	mg/L

# Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122903	T6	Water	04/06/2010 16:00	04/09/2010 12:06

## SW-846 8270C TCLP

CAS#	Parameter	Result	RDL	MDL	Units
1319-77-3	Cresols	0.027J	0.1000	0.0024	mg/L
1319-77-3MP	m,p-Cresol	0.012J	0.0500	0.0017	mg/L
95-48-7	o-Cresol	0.016J	0.0500	0.0009	mg/L

## SW-846 6010B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.016B	0.20	0.0030	mg/L
7440-39-3	Barium	2.42	1.00	0.00031	mg/L
7440-43-9	Cadmium	0.0058B	0.010	0.00016	mg/L
7440-47-3	Chromium	0.0021B	0.050	0.00032	mg/L
7439-92-1	Lead	0.013B	0.10	0.0015	mg/L
7440-02-0	Nickel	0.50	0.040	0.0012	mg/L

## SW-846 7470A TCLP

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00011B	0.0020	0.000055	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122904	T6 MS	Water	04/06/2010 16:00	04/09/2010 12:06

## SW-846 8270C TCLP

CAS#	Parameter	Result	RDL	MDL	Units
106-46-7	1,4-Dichlorobenzene	0.414	0.0500	0.0006	mg/L
121-14-2	2,4-Dinitrotoluene	0.527	0.0500	0.0012	mg/L
1319-77-3	Cresols	0.031J	0.1000	0.0024	mg/L
87-86-5	Pentachlorophenol	0.403	0.2500	0.0076	mg/L
1319-77-3MP	m,p-Cresol	0.013J	0.0500	0.0017	mg/L
95-48-7	o-Cresol	0.018J	0.0500	0.0009	mg/L

## SW-846 6010B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
7440-36-0	Antimony	0.47	0.060	0.0035	mg/L
7440-38-2	Arsenic	0.53	0.20	0.0030	mg/L
7440-39-3	Barium	2.82	1.00	0.00031	mg/L
7440-41-7	Beryllium	0.49	0.0050	0.000068	mg/L
7440-43-9	Cadmium	0.49	0.010	0.00016	mg/L
7440-47-3	Chromium	0.49	0.050	0.00032	mg/L
7439-92-1	Lead	0.49	0.10	0.0015	mg/L
7440-02-0	Nickel	0.96	0.040	0.0012	mg/L
7782-49-2	Selenium	0.50	0.10	0.0037	mg/L

## Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122904	T6 MS	Water	04/06/2010 16:00	04/09/2010 12:06

### SW-846 6010B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
7440-22-4	Silver	0.49	0.050	0.00058	mg/L

### SW-846 7470A TCLP

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00527	0.0020	0.000055	mg/L

### TX1005 Hydrocarbons by Range

CAS#	Parameter	Result	RDL	MDL	Units
GCSV-05-02	>C12-C28	26900	150	130	ug/L
GCSV-05-01	C6-C12	24700	150	112	ug/L
GCSV-05-04	Total TPH (C6-C35)	51600	150	112	ug/L

### SW-846 8260B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	4.26	0.500	0.016	mg/L
107-06-2	1,2-Dichloroethane	10.6	0.500	0.00860	mg/L
78-93-3	2-Butanone	3.58	2.50	0.00933	mg/L
71-43-2	Benzene	5.24	0.500	0.00542	mg/L
56-23-5	Carbon tetrachloride	4.24	0.500	0.015	mg/L
108-90-7	Chlorobenzene	4.40	0.500	0.00274	mg/L
67-66-3	Chloroform	8.71	0.500	0.00565	mg/L
127-18-4	Tetrachloroethene	4.64	0.500	0.012	mg/L
79-01-6	Trichloroethene	4.57	0.500	0.00618	mg/L
75-01-4	Vinyl chloride	4.37	0.500	0.00930	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122905	T6 MSD	Water	04/06/2010 16:00	04/09/2010 12:06

### SW-846 8270C TCLP

CAS#	Parameter	Result	RDL	MDL	Units
106-46-7	1,4-Dichlorobenzene	0.470	0.0500	0.0006	mg/L
121-14-2	2,4-Dinitrotoluene	0.527	0.0500	0.0012	mg/L
1319-77-3	Cresols	0.034J	0.1000	0.0024	mg/L
87-86-5	Pentachlorophenol	0.424	0.2500	0.0076	mg/L
1319-77-3MP	m,p-Cresol	0.014J	0.0500	0.0017	mg/L
95-48-7	o-Cresol	0.020J	0.0500	0.0009	mg/L

# Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122905	T6 MSD	Water	04/06/2010 16:00	04/09/2010 12:06

## SW-846 6010B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
7440-36-0	Antimony	0.49	0.060	0.0035	mg/L
7440-38-2	Arsenic	0.55	0.20	0.0030	mg/L
7440-39-3	Barium	2.99	1.00	0.00031	mg/L
7440-41-7	Beryllium	0.51	0.0050	0.000068	mg/L
7440-43-9	Cadmium	0.51	0.010	0.00016	mg/L
7440-47-3	Chromium	0.50	0.050	0.00032	mg/L
7439-92-1	Lead	0.51	0.10	0.0015	mg/L
7440-02-0	Nickel	1.01	0.040	0.0012	mg/L
7782-49-2	Selenium	0.51	0.10	0.0037	mg/L
7440-22-4	Silver	0.51	0.050	0.00058	mg/L

## SW-846 7470A TCLP

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00526	0.0020	0.000055	mg/L

## SW-846 8260B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	4.42	0.500	0.016	mg/L
107-06-2	1,2-Dichloroethane	9.17	0.500	0.00860	mg/L
78-93-3	2-Butanone	3.60	2.50	0.00933	mg/L
71-43-2	Benzene	5.14	0.500	0.00542	mg/L
56-23-5	Carbon tetrachloride	4.44	0.500	0.015	mg/L
108-90-7	Chlorobenzene	4.51	0.500	0.00274	mg/L
67-66-3	Chloroform	7.36	0.500	0.00565	mg/L
127-18-4	Tetrachloroethene	4.57	0.500	0.012	mg/L
79-01-6	Trichloroethene	4.45	0.500	0.00618	mg/L
75-01-4	Vinyl chloride	4.34	0.500	0.00930	mg/L

## TX1005 Hydrocarbons by Range

CAS#	Parameter	Result	RDL	MDL	Units
GCSV-05-02	>C12-C28	27100	149	130	ug/L
GCSV-05-01	C6-C12	24300	149	111	ug/L
GCSV-05-04	Total TPH (C6-C35)	51400	149	111	ug/L

# Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122906	T13	Solid	04/07/2010 11:00	04/09/2010 12:06

## SW-846 6010B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.79B	1.00	0.00031	mg/L
7439-92-1	Lead	0.0056B	0.10	0.0015	mg/L
7782-49-2	Selenium	0.037B	0.10	0.0037	mg/L
7440-22-4	Silver	0.0015B	0.050	0.00058	mg/L

## ASTM E203-96 WaterK

CAS#	Parameter	Result	RDL	MDL	Units
W-02-8	Karl Fisher H2O	49.3	0.100	0.036	%

## SW-846 8260B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.043J	0.200	0.00656	mg/L
107-06-2	1,2-Dichloroethane	1.42	0.200	0.00344	mg/L
71-43-2	Benzene	2.07	0.200	0.00217	mg/L
67-66-3	Chloroform	0.397	0.200	0.00226	mg/L
127-18-4	Tetrachloroethene	0.789	0.200	0.00484	mg/L
79-01-6	Trichloroethene	1.28	0.200	0.00247	mg/L
75-01-4	Vinyl chloride	0.068J	0.200	0.00372	mg/L

## ASTM D240 Heat of Combustion

CAS#	Parameter	Result	RDL	MDL	Units
WET-014	Heat of Combustion	3459	90	90	BTU/lb

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122907	T15	Solid	04/07/2010 16:00	04/09/2010 12:06

## SW-846 8260B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	0.105J	0.200	0.00217	mg/L

## ASTM D240 Heat of Combustion

CAS#	Parameter	Result	RDL	MDL	Units
WET-014	Heat of Combustion	17162	90	90	BTU/lb

# Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122908	T16	Water	04/07/2010 12:00	04/09/2010 12:06

## SW-846 8270C TCLP

CAS#	Parameter	Result	RDL	MDL	Units
1319-77-3	Cresols	0.012J	0.1000	0.0024	mg/L
1319-77-3MP	m,p-Cresol	0.00773J	0.0500	0.0017	mg/L
95-48-7	o-Cresol	0.00455J	0.0500	0.0009	mg/L

## SW-846 6010B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.43B	1.00	0.00031	mg/L
7440-47-3	Chromium	0.013B	0.050	0.00032	mg/L
7439-92-1	Lead	0.0046B	0.10	0.0015	mg/L
7440-02-0	Nickel	0.060	0.040	0.0012	mg/L
7782-49-2	Selenium	0.0074B	0.10	0.0037	mg/L

## SW-846 8260B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
78-93-3	2-Butanone	0.067J	1.00	0.00373	mg/L

## TX1005 Hydrocarbons by Range

CAS#	Parameter	Result	RDL	MDL	Units
GCSV-05-02	>C12-C28	97800	291	254	ug/L
GCSV-05-03	>C28-C35	49500	291	254	ug/L
GCSV-05-04	Total TPH (C6-C35)	147000	291	218	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122909	T18	Solid	04/07/2010 10:00	04/09/2010 12:06

## SW-846 8260B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	0.299	0.200	0.017	mg/L
67-66-3	Chloroform	4.48	1.00	0.011	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122910	T19	Solid	04/07/2010 13:00	04/09/2010 12:06

## SW-846 8260B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	0.051J	0.200	0.00344	mg/L

# Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122910	T19	Solid	04/07/2010 13:00	04/09/2010 12:06

## SW-846 8260B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	1.55	0.200	0.00217	mg/L
67-66-3	Chloroform	0.048J	0.200	0.00226	mg/L
79-01-6	Trichloroethene	0.047J	0.200	0.00247	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122911	T21	Water	04/07/2010 15:00	04/09/2010 12:06

## SW-846 8260B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	22.1	0.500	0.043	mg/L
71-43-2	Benzene	1.16	0.500	0.027	mg/L
67-66-3	Chloroform	43.4	2.50	0.028	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122912	T22	Solid	04/07/2010 10:15	04/09/2010 12:06

## SW-846 8260B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
67-66-3	Chloroform	0.052J	0.200	0.00226	mg/L

## SW-846 6010B TCLP

CAS#	Parameter	Result	RDL	MDL	Units
7440-39-3	Barium	0.47B	1.00	0.00031	mg/L
7439-92-1	Lead	0.0028B	0.10	0.0015	mg/L
7782-49-2	Selenium	0.041B	0.10	0.0037	mg/L
7440-22-4	Silver	0.0036B	0.050	0.00058	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122901	T2	Water	04/06/2010 12:00	04/09/2010 12:06

## SW-846 8260B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			200	04/16/2010 01:26	RJU	429573

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.200U	0.200	0.033	mg/L
107-06-2	1,2-Dichloroethane	28.9	0.200	0.017	mg/L
78-93-3	2-Butanone	5.64	5.00	0.019	mg/L
71-43-2	Benzene	2.43	0.200	0.011	mg/L
56-23-5	Carbon tetrachloride	0.200U	0.200	0.030	mg/L
108-90-7	Chlorobenzene	0.200U	0.200	0.00548	mg/L
67-66-3	Chloroform	1.25	1.00	0.011	mg/L
127-18-4	Tetrachloroethene	0.534	0.200	0.024	mg/L
79-01-6	Trichloroethene	12.7	0.200	0.012	mg/L
75-01-4	Vinyl chloride	0.200U	0.200	0.019	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	10000	10400	ug/L	104	62 - 130
1868-53-7	Dibromofluoromethane	10000	9880	ug/L	99	65 - 127
2037-26-5	Toluene d8	10000	10800	ug/L	108	71 - 134
17060-07-0	1,2-Dichloroethane-d4	10000	9200	ug/L	92	62 - 127

## SW-846 8270C TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/16/2010 08:00	429512	3510C	1	04/16/2010 13:57	KCB	429591

CAS#	Parameter	Result	RDL	MDL	Units
106-46-7	1,4-Dichlorobenzene	0.0500U	0.0500	0.0006	mg/L
95-95-4	2,4,5-Trichlorophenol	0.0500U	0.0500	0.0006	mg/L
88-06-2	2,4,6-Trichlorophenol	0.0500U	0.0500	0.0008	mg/L
121-14-2	2,4-Dinitrotoluene	0.0500U	0.0500	0.0012	mg/L
1319-77-3	Cresols	0.1000U	0.1000	0.0024	mg/L
118-74-1	Hexachlorobenzene	0.0500U	0.0500	0.0013	mg/L
87-68-3	Hexachlorobutadiene	0.0500U	0.0500	0.0011	mg/L
67-72-1	Hexachloroethane	0.0500U	0.0500	0.0055	mg/L
98-95-3	Nitrobenzene	0.0500U	0.0500	0.0011	mg/L
87-86-5	Pentachlorophenol	0.2500U	0.2500	0.0076	mg/L
110-86-1	Pyridine	0.0500U	0.0500	0.0077	mg/L
1319-77-3MP	m,p-Cresol	0.0500U	0.0500	0.0017	mg/L
95-48-7	o-Cresol	0.0500U	0.0500	0.0009	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	250	211	ug/L	84	48 - 123
321-60-8	2-Fluorobiphenyl	250	246	ug/L	98	16 - 128
1718-51-0	Terphenyl-d14	250	180	ug/L	72	38 - 167
4165-62-2	Phenol-d5	500	171	ug/L	34	10 - 123
367-12-4	2-Fluorophenol	500	247	ug/L	49	10 - 120
118-79-6	2,4,6-Tribromophenol	500	557	ug/L	111	44 - 121

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122901	T2	Water	04/06/2010 12:00	04/09/2010 12:06

## SW-846 6010B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429492	SW-846 3010A	1	04/15/2010 23:49	CLB	429524

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.020B	0.20	0.0030	mg/L
7440-39-3	Barium	16.8	1.00	0.00031	mg/L
7440-43-9	Cadmium	0.010U	0.010	0.00016	mg/L
7440-47-3	Chromium	0.013B	0.050	0.00032	mg/L
7439-92-1	Lead	0.10U	0.10	0.0015	mg/L
7782-49-2	Selenium	0.0061B	0.10	0.0037	mg/L
7440-22-4	Silver	0.050U	0.050	0.00058	mg/L

## SW-846 7470A TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429494	SW-846 7470A	1	04/15/2010 12:03	TEA	429521

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00067B	0.020	0.00055	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122902	T4	Water	04/06/2010 15:00	04/09/2010 12:06

## SW-846 8260B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			40	04/15/2010 21:57	SLR	429573

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.200U	0.200	0.00656	mg/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	0.00344	mg/L
78-93-3	2-Butanone	1.00U	1.00	0.00373	mg/L
71-43-2	Benzene	0.200U	0.200	0.00217	mg/L
56-23-5	Carbon tetrachloride	0.200U	0.200	0.00592	mg/L
108-90-7	Chlorobenzene	0.200U	0.200	0.00110	mg/L
67-66-3	Chloroform	0.200U	0.200	0.00226	mg/L
127-18-4	Tetrachloroethene	0.200U	0.200	0.00484	mg/L
79-01-6	Trichloroethene	0.200U	0.200	0.00247	mg/L
75-01-4	Vinyl chloride	0.200U	0.200	0.00372	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2000	1920	ug/L	96	62 - 130
1868-53-7	Dibromofluoromethane	2000	1990	ug/L	100	65 - 127
2037-26-5	Toluene d8	2000	1870	ug/L	94	71 - 134
17060-07-0	1,2-Dichloroethane-d4	2000	1930	ug/L	97	62 - 127

## SW-846 8270C TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/16/2010 08:00	429512	3510C	1	04/16/2010 14:12	KCB	429591

CAS#	Parameter	Result	RDL	MDL	Units
106-46-7	1,4-Dichlorobenzene	0.0500U	0.0500	0.0006	mg/L
95-95-4	2,4,5-Trichlorophenol	0.0500U	0.0500	0.0006	mg/L
88-06-2	2,4,6-Trichlorophenol	0.0500U	0.0500	0.0008	mg/L
121-14-2	2,4-Dinitrotoluene	0.0500U	0.0500	0.0012	mg/L
1319-77-3	Cresols	0.1000U	0.1000	0.0024	mg/L
118-74-1	Hexachlorobenzene	0.0500U	0.0500	0.0013	mg/L
87-68-3	Hexachlorobutadiene	0.0500U	0.0500	0.0011	mg/L
67-72-1	Hexachloroethane	0.0500U	0.0500	0.0055	mg/L
98-95-3	Nitrobenzene	0.0500U	0.0500	0.0011	mg/L
87-86-5	Pentachlorophenol	0.2500U	0.2500	0.0076	mg/L
110-86-1	Pyridine	0.0500U	0.0500	0.0077	mg/L
1319-77-3MP	m,p-Cresol	0.0500U	0.0500	0.0017	mg/L
95-48-7	o-Cresol	0.0500U	0.0500	0.0009	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	250	233	ug/L	93	48 - 123
321-60-8	2-Fluorobiphenyl	250	235	ug/L	94	16 - 128
1718-51-0	Terphenyl-d14	250	182	ug/L	73	38 - 167
4165-62-2	Phenol-d5	500	211	ug/L	42	10 - 123
367-12-4	2-Fluorophenol	500	308	ug/L	62	10 - 120
118-79-6	2,4,6-Tribromophenol	500	512	ug/L	102	44 - 121

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122902	T4	Water	04/06/2010 15:00	04/09/2010 12:06

## TX1005 Hydrocarbons by Range

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/16/2010 14:00	429379	TNRCC 1005	1	04/19/2010 15:41	SMH	429750

CAS#	Parameter	Result	RDL	MDL	Units
GCSV-05-02	>C12-C28	149U	149	130	ug/L
GCSV-05-03	>C28-C35	149U	149	130	ug/L
GCSV-05-01	C6-C12	149U	149	112	ug/L
GCSV-05-04	Total TPH (C6-C35)	149U	149	112	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
84-15-1	o-Terphenyl	16600	22400	ug/L	135	58 - 148

## SW-846 6010B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429492	SW-846 3010A	1	04/16/2010 00:04	CLB	429524

CAS#	Parameter	Result	RDL	MDL	Units
7440-36-0	Antimony	0.020B	0.060	0.0035	mg/L
7440-38-2	Arsenic	0.0030B	0.20	0.0030	mg/L
7440-39-3	Barium	13.1	1.00	0.00031	mg/L
7440-41-7	Beryllium	0.0050U	0.0050	0.000068	mg/L
7440-43-9	Cadmium	0.010U	0.010	0.00016	mg/L
7440-47-3	Chromium	0.050U	0.050	0.00032	mg/L
7439-92-1	Lead	0.10U	0.10	0.0015	mg/L
7440-02-0	Nickel	0.038B	0.040	0.0012	mg/L
7782-49-2	Selenium	0.10U	0.10	0.0037	mg/L
7440-22-4	Silver	0.050U	0.050	0.00058	mg/L

## SW-846 7470A TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429494	SW-846 7470A	1	04/15/2010 12:04	TEA	429521

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0020U	0.0020	0.000055	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122903	T6	Water	04/06/2010 16:00	04/09/2010 12:06

## SW-846 8260B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			100	04/15/2010 21:35	SLR	429573

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.500U	0.500	0.016	mg/L
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>6.91</b>	<b>0.500</b>	<b>0.00860</b>	<b>mg/L</b>
78-93-3	2-Butanone	2.50U	2.50	0.00933	mg/L
<b>71-43-2</b>	<b>Benzene</b>	<b>0.802</b>	<b>0.500</b>	<b>0.00542</b>	<b>mg/L</b>
56-23-5	Carbon tetrachloride	0.500U	0.500	0.015	mg/L
108-90-7	Chlorobenzene	0.500U	0.500	0.00274	mg/L
<b>67-66-3</b>	<b>Chloroform</b>	<b>5.36</b>	<b>0.500</b>	<b>0.00565</b>	<b>mg/L</b>
127-18-4	Tetrachloroethene	0.500U	0.500	0.012	mg/L
<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.245J</b>	<b>0.500</b>	<b>0.00618</b>	<b>mg/L</b>
75-01-4	Vinyl chloride	0.100U	0.100	0.00930	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	5000	5020	ug/L	100	62 - 130
1868-53-7	Dibromofluoromethane	5000	5010	ug/L	100	65 - 127
2037-26-5	Toluene d8	5000	5010	ug/L	100	71 - 134
17060-07-0	1,2-Dichloroethane-d4	5000	4600	ug/L	92	62 - 127

## SW-846 8270C TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/16/2010 08:00	429512	3510C	1	04/16/2010 14:28	KCB	429591

CAS#	Parameter	Result	RDL	MDL	Units
106-46-7	1,4-Dichlorobenzene	0.0500U	0.0500	0.0006	mg/L
95-95-4	2,4,5-Trichlorophenol	0.0500U	0.0500	0.0006	mg/L
88-06-2	2,4,6-Trichlorophenol	0.0500U	0.0500	0.0008	mg/L
121-14-2	2,4-Dinitrotoluene	0.0500U	0.0500	0.0012	mg/L
<b>1319-77-3</b>	<b>Cresols</b>	<b>0.027J</b>	<b>0.1000</b>	<b>0.0024</b>	<b>mg/L</b>
118-74-1	Hexachlorobenzene	0.0500U	0.0500	0.0013	mg/L
87-68-3	Hexachlorobutadiene	0.0500U	0.0500	0.0011	mg/L
67-72-1	Hexachloroethane	0.0500U	0.0500	0.0055	mg/L
98-95-3	Nitrobenzene	0.0500U	0.0500	0.0011	mg/L
87-86-5	Pentachlorophenol	0.2500U	0.2500	0.0076	mg/L
110-86-1	Pyridine	0.0500U	0.0500	0.0077	mg/L
<b>1319-77-3MP</b>	<b>m,p-Cresol</b>	<b>0.012J</b>	<b>0.0500</b>	<b>0.0017</b>	<b>mg/L</b>
<b>95-48-7</b>	<b>o-Cresol</b>	<b>0.016J</b>	<b>0.0500</b>	<b>0.0009</b>	<b>mg/L</b>

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	250	218	ug/L	87	48 - 123
321-60-8	2-Fluorobiphenyl	250	212	ug/L	85	16 - 128
1718-51-0	Terphenyl-d14	250	174	ug/L	70	38 - 167
4165-62-2	Phenol-d5	500	227	ug/L	45	10 - 123
367-12-4	2-Fluorophenol	500	311	ug/L	62	10 - 120
118-79-6	2,4,6-Tribromophenol	500	496	ug/L	99	44 - 121

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122903	T6	Water	04/06/2010 16:00	04/09/2010 12:06

## TX1005 Hydrocarbons by Range

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/16/2010 14:00	429379	TNRCC 1005	1	04/20/2010 11:18	SMH	429794

CAS#	Parameter	Result	RDL	MDL	Units
GCSV-05-02	>C12-C28	145U	145	126	ug/L
GCSV-05-03	>C28-C35	145U	145	126	ug/L
GCSV-05-01	C6-C12	145U	145	109	ug/L
GCSV-05-04	Total TPH (C6-C35)	145U	145	109	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
84-15-1	o-Terphenyl	16100	18000	ug/L	112	58 - 148

## SW-846 6010B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429492	SW-846 3010A	1	04/15/2010 20:48	CLB	429524

CAS#	Parameter	Result	RDL	MDL	Units
7440-36-0	Antimony	0.060U	0.060	0.0035	mg/L
<b>7440-38-2</b>	<b>Arsenic</b>	<b>0.016B</b>	<b>0.20</b>	<b>0.0030</b>	<b>mg/L</b>
<b>7440-39-3</b>	<b>Barium</b>	<b>2.42</b>	<b>1.00</b>	<b>0.00031</b>	<b>mg/L</b>
7440-41-7	Beryllium	0.0050U	0.0050	0.000068	mg/L
<b>7440-43-9</b>	<b>Cadmium</b>	<b>0.0058B</b>	<b>0.010</b>	<b>0.00016</b>	<b>mg/L</b>
<b>7440-47-3</b>	<b>Chromium</b>	<b>0.0021B</b>	<b>0.050</b>	<b>0.00032</b>	<b>mg/L</b>
<b>7439-92-1</b>	<b>Lead</b>	<b>0.013B</b>	<b>0.10</b>	<b>0.0015</b>	<b>mg/L</b>
<b>7440-02-0</b>	<b>Nickel</b>	<b>0.50</b>	<b>0.040</b>	<b>0.0012</b>	<b>mg/L</b>
7782-49-2	Selenium	0.10U	0.10	0.0037	mg/L
7440-22-4	Silver	0.050U	0.050	0.00058	mg/L

## SW-846 7470A TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429494	SW-846 7470A	1	04/15/2010 11:56	TEA	429521

CAS#	Parameter	Result	RDL	MDL	Units
<b>7439-97-6</b>	<b>Mercury</b>	<b>0.00011B</b>	<b>0.0020</b>	<b>0.000055</b>	<b>mg/L</b>

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122904	T6 MS	Water	04/06/2010 16:00	04/09/2010 12:06

## SW-846 8260B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			100	04/15/2010 22:42	RJU	429573

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	4.26	0.500	0.016	mg/L
107-06-2	1,2-Dichloroethane	10.6	0.500	0.00860	mg/L
78-93-3	2-Butanone	3.58	2.50	0.00933	mg/L
71-43-2	Benzene	5.24	0.500	0.00542	mg/L
56-23-5	Carbon tetrachloride	4.24	0.500	0.015	mg/L
108-90-7	Chlorobenzene	4.40	0.500	0.00274	mg/L
67-66-3	Chloroform	8.71	0.500	0.00565	mg/L
127-18-4	Tetrachloroethene	4.64	0.500	0.012	mg/L
79-01-6	Trichloroethene	4.57	0.500	0.00618	mg/L
75-01-4	Vinyl chloride	4.37	0.500	0.00930	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	5000	5030	ug/L	101	62 - 130
1868-53-7	Dibromofluoromethane	5000	4800	ug/L	96	65 - 127
2037-26-5	Toluene d8	5000	4980	ug/L	100	71 - 134
17060-07-0	1,2-Dichloroethane-d4	5000	4610	ug/L	92	62 - 127

## SW-846 8270C TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/16/2010 08:00	429512	3510C	1	04/16/2010 14:44	KCB	429591

CAS#	Parameter	Result	RDL	MDL	Units
106-46-7	1,4-Dichlorobenzene	0.414	0.0500	0.0006	mg/L
95-95-4	2,4,5-Trichlorophenol	0.0500U	0.0500	0.0006	mg/L
88-06-2	2,4,6-Trichlorophenol	0.0500U	0.0500	0.0008	mg/L
121-14-2	2,4-Dinitrotoluene	0.527	0.0500	0.0012	mg/L
1319-77-3	Cresols	0.031J	0.1000	0.0024	mg/L
118-74-1	Hexachlorobenzene	0.0500U	0.0500	0.0013	mg/L
87-68-3	Hexachlorobutadiene	0.0500U	0.0500	0.0011	mg/L
67-72-1	Hexachloroethane	0.0500U	0.0500	0.0055	mg/L
98-95-3	Nitrobenzene	0.0500U	0.0500	0.0011	mg/L
87-86-5	Pentachlorophenol	0.403	0.2500	0.0076	mg/L
110-86-1	Pyridine	0.0500U	0.0500	0.0077	mg/L
1319-77-3MP	m,p-Cresol	0.013J	0.0500	0.0017	mg/L
95-48-7	o-Cresol	0.018J	0.0500	0.0009	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	250	229	ug/L	92	48 - 123
321-60-8	2-Fluorobiphenyl	250	239	ug/L	96	16 - 128
1718-51-0	Terphenyl-d14	250	182	ug/L	73	38 - 167
4165-62-2	Phenol-d5	500	219	ug/L	44	10 - 123
367-12-4	2-Fluorophenol	500	287	ug/L	57	10 - 120
118-79-6	2,4,6-Tribromophenol	500	532	ug/L	106	44 - 121

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122904	T6 MS	Water	04/06/2010 16:00	04/09/2010 12:06

## TX1005 Hydrocarbons by Range

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/16/2010 14:00	429379	TNRCC 1005	1	04/20/2010 11:47	SMH	429794

CAS#	Parameter	Result	RDL	MDL	Units
<b>GCSV-05-02</b>	<b>&gt;C12-C28</b>	<b>26900</b>	<b>150</b>	<b>130</b>	<b>ug/L</b>
GCSV-05-03	>C28-C35	150U	150	130	ug/L
<b>GCSV-05-01</b>	<b>C6-C12</b>	<b>24700</b>	<b>150</b>	<b>112</b>	<b>ug/L</b>
<b>GCSV-05-04</b>	<b>Total TPH (C6-C35)</b>	<b>51600</b>	<b>150</b>	<b>112</b>	<b>ug/L</b>

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
84-15-1	o-Terphenyl	16600	19800	ug/L	119	58 - 148

## SW-846 6010B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429492	SW-846 3010A	1	04/15/2010 20:55	CLB	429524

CAS#	Parameter	Result	RDL	MDL	Units
<b>7440-36-0</b>	<b>Antimony</b>	<b>0.47</b>	<b>0.060</b>	<b>0.0035</b>	<b>mg/L</b>
<b>7440-38-2</b>	<b>Arsenic</b>	<b>0.53</b>	<b>0.20</b>	<b>0.0030</b>	<b>mg/L</b>
<b>7440-39-3</b>	<b>Barium</b>	<b>2.82</b>	<b>1.00</b>	<b>0.00031</b>	<b>mg/L</b>
<b>7440-41-7</b>	<b>Beryllium</b>	<b>0.49</b>	<b>0.0050</b>	<b>0.000068</b>	<b>mg/L</b>
<b>7440-43-9</b>	<b>Cadmium</b>	<b>0.49</b>	<b>0.010</b>	<b>0.00016</b>	<b>mg/L</b>
<b>7440-47-3</b>	<b>Chromium</b>	<b>0.49</b>	<b>0.050</b>	<b>0.00032</b>	<b>mg/L</b>
<b>7439-92-1</b>	<b>Lead</b>	<b>0.49</b>	<b>0.10</b>	<b>0.0015</b>	<b>mg/L</b>
<b>7440-02-0</b>	<b>Nickel</b>	<b>0.96</b>	<b>0.040</b>	<b>0.0012</b>	<b>mg/L</b>
<b>7782-49-2</b>	<b>Selenium</b>	<b>0.50</b>	<b>0.10</b>	<b>0.0037</b>	<b>mg/L</b>
<b>7440-22-4</b>	<b>Silver</b>	<b>0.49</b>	<b>0.050</b>	<b>0.00058</b>	<b>mg/L</b>

## SW-846 7470A TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429494	SW-846 7470A	1	04/15/2010 11:58	TEA	429521

CAS#	Parameter	Result	RDL	MDL	Units
<b>7439-97-6</b>	<b>Mercury</b>	<b>0.00527</b>	<b>0.0020</b>	<b>0.000055</b>	<b>mg/L</b>

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122905	T6 MSD	Water	04/06/2010 16:00	04/09/2010 12:06

## SW-846 8260B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			100	04/15/2010 23:04	RJU	429573

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	4.42	0.500	0.016	mg/L
107-06-2	1,2-Dichloroethane	9.17	0.500	0.00860	mg/L
78-93-3	2-Butanone	3.60	2.50	0.00933	mg/L
71-43-2	Benzene	5.14	0.500	0.00542	mg/L
56-23-5	Carbon tetrachloride	4.44	0.500	0.015	mg/L
108-90-7	Chlorobenzene	4.51	0.500	0.00274	mg/L
67-66-3	Chloroform	7.36	0.500	0.00565	mg/L
127-18-4	Tetrachloroethene	4.57	0.500	0.012	mg/L
79-01-6	Trichloroethene	4.45	0.500	0.00618	mg/L
75-01-4	Vinyl chloride	4.34	0.500	0.00930	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	5000	4910	ug/L	98	62 - 130
1868-53-7	Dibromofluoromethane	5000	4990	ug/L	100	65 - 127
2037-26-5	Toluene d8	5000	5100	ug/L	102	71 - 134
17060-07-0	1,2-Dichloroethane-d4	5000	4660	ug/L	93	62 - 127

## SW-846 8270C TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/16/2010 08:00	429512	3510C	1	04/16/2010 15:00	KCB	429591

CAS#	Parameter	Result	RDL	MDL	Units
106-46-7	1,4-Dichlorobenzene	0.470	0.0500	0.0006	mg/L
95-95-4	2,4,5-Trichlorophenol	0.0500U	0.0500	0.0006	mg/L
88-06-2	2,4,6-Trichlorophenol	0.0500U	0.0500	0.0008	mg/L
121-14-2	2,4-Dinitrotoluene	0.527	0.0500	0.0012	mg/L
1319-77-3	Cresols	0.034J	0.1000	0.0024	mg/L
118-74-1	Hexachlorobenzene	0.0500U	0.0500	0.0013	mg/L
87-68-3	Hexachlorobutadiene	0.0500U	0.0500	0.0011	mg/L
67-72-1	Hexachloroethane	0.0500U	0.0500	0.0055	mg/L
98-95-3	Nitrobenzene	0.0500U	0.0500	0.0011	mg/L
87-86-5	Pentachlorophenol	0.424	0.2500	0.0076	mg/L
110-86-1	Pyridine	0.0500U	0.0500	0.0077	mg/L
1319-77-3MP	m,p-Cresol	0.014J	0.0500	0.0017	mg/L
95-48-7	o-Cresol	0.020J	0.0500	0.0009	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	250	244	ug/L	98	48 - 123
321-60-8	2-Fluorobiphenyl	250	245	ug/L	98	16 - 128
1718-51-0	Terphenyl-d14	250	181	ug/L	72	38 - 167
4165-62-2	Phenol-d5	500	222	ug/L	44	10 - 123
367-12-4	2-Fluorophenol	500	307	ug/L	61	10 - 120
118-79-6	2,4,6-Tribromophenol	500	512	ug/L	102	44 - 121

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122905	T6 MSD	Water	04/06/2010 16:00	04/09/2010 12:06

## TX1005 Hydrocarbons by Range

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/16/2010 14:00	429379	TNRCC 1005	1	04/19/2010 18:19	SMH	429750

CAS#	Parameter	Result	RDL	MDL	Units
GCSV-05-02	>C12-C28	27100	149	130	ug/L
GCSV-05-03	>C28-C35	149U	149	130	ug/L
GCSV-05-01	C6-C12	24300	149	111	ug/L
GCSV-05-04	Total TPH (C6-C35)	51400	149	111	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
84-15-1	o-Terphenyl	16500	20800	ug/L	126	58 - 148

## SW-846 6010B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429492	SW-846 3010A	1	04/15/2010 21:02	CLB	429524

CAS#	Parameter	Result	RDL	MDL	Units
7440-36-0	Antimony	0.49	0.060	0.0035	mg/L
7440-38-2	Arsenic	0.55	0.20	0.0030	mg/L
7440-39-3	Barium	2.99	1.00	0.00031	mg/L
7440-41-7	Beryllium	0.51	0.0050	0.000068	mg/L
7440-43-9	Cadmium	0.51	0.010	0.00016	mg/L
7440-47-3	Chromium	0.50	0.050	0.00032	mg/L
7439-92-1	Lead	0.51	0.10	0.0015	mg/L
7440-02-0	Nickel	1.01	0.040	0.0012	mg/L
7782-49-2	Selenium	0.51	0.10	0.0037	mg/L
7440-22-4	Silver	0.51	0.050	0.00058	mg/L

## SW-846 7470A TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429494	SW-846 7470A	1	04/15/2010 12:00	TEA	429521

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.00526	0.0020	0.000055	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122906	T13	Solid	04/07/2010 11:00	04/09/2010 12:06

## SW-846 8260B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			40	04/16/2010 01:50	RJU	429573

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.043J	0.200	0.00656	mg/L
107-06-2	1,2-Dichloroethane	1.42	0.200	0.00344	mg/L
78-93-3	2-Butanone	0.200U	0.200	0.00373	mg/L
71-43-2	Benzene	2.07	0.200	0.00217	mg/L
56-23-5	Carbon tetrachloride	0.200U	0.200	0.00592	mg/L
108-90-7	Chlorobenzene	0.200U	0.200	0.00110	mg/L
67-66-3	Chloroform	0.397	0.200	0.00226	mg/L
127-18-4	Tetrachloroethene	0.789	0.200	0.00484	mg/L
79-01-6	Trichloroethene	1.28	0.200	0.00247	mg/L
75-01-4	Vinyl chloride	0.068J	0.200	0.00372	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2000	2150	ug/L	108	62 - 130
1868-53-7	Dibromofluoromethane	2000	1950	ug/L	98	65 - 127
2037-26-5	Toluene d8	2000	2190	ug/L	110	71 - 134
17060-07-0	1,2-Dichloroethane-d4	2000	1810	ug/L	91	62 - 127

## SW-846 6010B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429507	SW-846 3010A	1	04/15/2010 23:42	CLB	429524

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.20U	0.20	0.0030	mg/L
7440-39-3	Barium	0.79B	1.00	0.00031	mg/L
7440-43-9	Cadmium	0.010U	0.010	0.00016	mg/L
7440-47-3	Chromium	0.050U	0.050	0.00032	mg/L
7439-92-1	Lead	0.0056B	0.10	0.0015	mg/L
7782-49-2	Selenium	0.037B	0.10	0.0037	mg/L
7440-22-4	Silver	0.0015B	0.050	0.00058	mg/L

## SW-846 7470A TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429508	SW-846 7470A	1	04/15/2010 12:20	TEA	429521

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0020U	0.0020	0.000055	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122906	T13	Solid	04/07/2010 11:00	04/09/2010 12:06

## ASTM D240 Heat of Combustion

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/20/2010 08:00	429779	EPA 1010	1	04/20/2010 08:00	AEL	429780

CAS#	Parameter	Result	RDL	MDL	Units
WET-014	Heat of Combustion	3459	90	90	BTU/lb

## ASTM E203-96 WaterK

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/13/2010 09:38	JEM	429420

CAS#	Parameter	Result	RDL	MDL	Units
W-02-8	Karl Fisher H2O	49.3	0.100	0.036	%

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122907	T15	Solid	04/07/2010 16:00	04/09/2010 12:06

## SW-846 8260B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			40	04/16/2010 02:14	RJU	429573

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.200U	0.200	0.00656	mg/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	0.00344	mg/L
78-93-3	2-Butanone	0.200U	0.200	0.00373	mg/L
<b>71-43-2</b>	<b>Benzene</b>	<b>0.105J</b>	<b>0.200</b>	<b>0.00217</b>	<b>mg/L</b>
56-23-5	Carbon tetrachloride	0.200U	0.200	0.00592	mg/L
108-90-7	Chlorobenzene	0.200U	0.200	0.00110	mg/L
67-66-3	Chloroform	0.200U	0.200	0.00226	mg/L
127-18-4	Tetrachloroethene	0.200U	0.200	0.00484	mg/L
79-01-6	Trichloroethene	0.200U	0.200	0.00247	mg/L
75-01-4	Vinyl chloride	0.200U	0.200	0.00372	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2000	2030	ug/L	102	62 - 130
1868-53-7	Dibromofluoromethane	2000	2020	ug/L	101	65 - 127
2037-26-5	Toluene d8	2000	2190	ug/L	110	71 - 134
17060-07-0	1,2-Dichloroethane-d4	2000	2140	ug/L	107	62 - 127

## SW-846 1010 Flashpoint

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/15/2010 13:42	MDT	429555

CAS#	Parameter	Result	RDL	MDL	Units
000000-01-3	FlashPoint	>170	50	50	Deg F

## ASTM D240 Heat of Combustion

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/20/2010 08:00	429779	EPA 1010	1	04/20/2010 08:00	AEL	429780

CAS#	Parameter	Result	RDL	MDL	Units
<b>WET-014</b>	<b>Heat of Combustion</b>	<b>17162</b>	<b>90</b>	<b>90</b>	<b>BTU/lb</b>

## ASTM E203-96 WaterK

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/13/2010 09:38	JEM	429420

CAS#	Parameter	Result	RDL	MDL	Units
W-02-8	Karl Fisher H2O	0.100U	0.100	0.036	%

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122908	T16	Water	04/07/2010 12:00	04/09/2010 12:06

## SW-846 8260B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			40	04/15/2010 23:52	RJU	429573

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.200U	0.200	0.00656	mg/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	0.00344	mg/L
<b>78-93-3</b>	<b>2-Butanone</b>	<b>0.067J</b>	<b>1.00</b>	<b>0.00373</b>	<b>mg/L</b>
71-43-2	Benzene	0.200U	0.200	0.00217	mg/L
56-23-5	Carbon tetrachloride	0.200U	0.200	0.00592	mg/L
108-90-7	Chlorobenzene	0.200U	0.200	0.00110	mg/L
67-66-3	Chloroform	0.200U	0.200	0.00226	mg/L
127-18-4	Tetrachloroethene	0.200U	0.200	0.00484	mg/L
79-01-6	Trichloroethene	0.200U	0.200	0.00247	mg/L
75-01-4	Vinyl chloride	0.200U	0.200	0.00372	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2000	2170	ug/L	109	62 - 130
1868-53-7	Dibromofluoromethane	2000	1830	ug/L	92	65 - 127
2037-26-5	Toluene d8	2000	2150	ug/L	108	71 - 134
17060-07-0	1,2-Dichloroethane-d4	2000	1790	ug/L	90	62 - 127

## SW-846 8270C TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/16/2010 08:00	429512	3510C	1	04/16/2010 15:16	KCB	429591

CAS#	Parameter	Result	RDL	MDL	Units
106-46-7	1,4-Dichlorobenzene	0.0500U	0.0500	0.0006	mg/L
95-95-4	2,4,5-Trichlorophenol	0.0500U	0.0500	0.0006	mg/L
88-06-2	2,4,6-Trichlorophenol	0.0500U	0.0500	0.0008	mg/L
121-14-2	2,4-Dinitrotoluene	0.0500U	0.0500	0.0012	mg/L
<b>1319-77-3</b>	<b>Cresols</b>	<b>0.012J</b>	<b>0.1000</b>	<b>0.0024</b>	<b>mg/L</b>
118-74-1	Hexachlorobenzene	0.0500U	0.0500	0.0013	mg/L
87-68-3	Hexachlorobutadiene	0.0500U	0.0500	0.0011	mg/L
67-72-1	Hexachloroethane	0.0500U	0.0500	0.0055	mg/L
98-95-3	Nitrobenzene	0.0500U	0.0500	0.0011	mg/L
87-86-5	Pentachlorophenol	0.2500U	0.2500	0.0076	mg/L
110-86-1	Pyridine	0.0500U	0.0500	0.0077	mg/L
<b>1319-77-3MP</b>	<b>m,p-Cresol</b>	<b>0.00773J</b>	<b>0.0500</b>	<b>0.0017</b>	<b>mg/L</b>
<b>95-48-7</b>	<b>o-Cresol</b>	<b>0.00455J</b>	<b>0.0500</b>	<b>0.0009</b>	<b>mg/L</b>

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	250	241	ug/L	96	48 - 123
321-60-8	2-Fluorobiphenyl	250	285	ug/L	114	16 - 128
1718-51-0	Terphenyl-d14	250	154	ug/L	62	38 - 167
4165-62-2	Phenol-d5	500	207	ug/L	41	10 - 123
367-12-4	2-Fluorophenol	500	210	ug/L	42	10 - 120
118-79-6	2,4,6-Tribromophenol	500	486	ug/L	97	44 - 121

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122908	T16	Water	04/07/2010 12:00	04/09/2010 12:06

## TX1005 Hydrocarbons by Range

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/16/2010 14:00	429379	TNRCC 1005	2	04/20/2010 12:16	SMH	429794

CAS#	Parameter	Result	RDL	MDL	Units
GCSV-05-02	>C12-C28	97800	291	254	ug/L
GCSV-05-03	>C28-C35	49500	291	254	ug/L
GCSV-05-01	C6-C12	291U	291	218	ug/L
GCSV-05-04	Total TPH (C6-C35)	147000	291	218	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
84-15-1	o-Terphenyl	16200	26400	ug/L	163*	58 - 148

## SW-846 6010B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429492	SW-846 3010A	1	04/15/2010 21:43	CLB	429524

CAS#	Parameter	Result	RDL	MDL	Units
7440-36-0	Antimony	0.060U	0.060	0.0035	mg/L
7440-38-2	Arsenic	0.20U	0.20	0.0030	mg/L
7440-39-3	Barium	0.43B	1.00	0.00031	mg/L
7440-41-7	Beryllium	0.0050U	0.0050	0.000068	mg/L
7440-43-9	Cadmium	0.010U	0.010	0.00016	mg/L
7440-47-3	Chromium	0.013B	0.050	0.00032	mg/L
7439-92-1	Lead	0.0046B	0.10	0.0015	mg/L
7440-02-0	Nickel	0.060	0.040	0.0012	mg/L
7782-49-2	Selenium	0.0074B	0.10	0.0037	mg/L
7440-22-4	Silver	0.050U	0.050	0.00058	mg/L

## SW-846 7470A TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429494	SW-846 7470A	1	04/15/2010 12:06	TEA	429521

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.020U	0.020	0.00055	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122909	T18	Solid	04/07/2010 10:00	04/09/2010 12:06

## SW-846 8260B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			200	04/16/2010 00:16	RJU	429573

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.200U	0.200	0.033	mg/L
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>0.299</b>	<b>0.200</b>	<b>0.017</b>	<b>mg/L</b>
78-93-3	2-Butanone	1.00U	1.00	0.019	mg/L
71-43-2	Benzene	0.200U	0.200	0.011	mg/L
56-23-5	Carbon tetrachloride	0.200U	0.200	0.030	mg/L
108-90-7	Chlorobenzene	0.200U	0.200	0.00548	mg/L
<b>67-66-3</b>	<b>Chloroform</b>	<b>4.48</b>	<b>1.00</b>	<b>0.011</b>	<b>mg/L</b>
127-18-4	Tetrachloroethene	0.200U	0.200	0.024	mg/L
79-01-6	Trichloroethene	0.200U	0.200	0.012	mg/L
75-01-4	Vinyl chloride	0.200U	0.200	0.019	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	10000	10200	ug/L	102	62 - 130
1868-53-7	Dibromofluoromethane	10000	10200	ug/L	102	65 - 127
2037-26-5	Toluene d8	10000	8850	ug/L	89	71 - 134
17060-07-0	1,2-Dichloroethane-d4	10000	10000	ug/L	100	62 - 127

## SW-846 1010 Flashpoint

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/15/2010 13:42	MDT	429555

CAS#	Parameter	Result	RDL	MDL	Units
000000-01-3	FlashPoint	>170	50	50	Deg F

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122910	T19	Solid	04/07/2010 13:00	04/09/2010 12:06

## SW-846 8260B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			40	04/16/2010 02:37	RJU	429573

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.200U	0.200	0.00656	mg/L
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>0.051J</b>	<b>0.200</b>	<b>0.00344</b>	<b>mg/L</b>
78-93-3	2-Butanone	0.200U	0.200	0.00373	mg/L
<b>71-43-2</b>	<b>Benzene</b>	<b>1.55</b>	<b>0.200</b>	<b>0.00217</b>	<b>mg/L</b>
56-23-5	Carbon tetrachloride	0.200U	0.200	0.00592	mg/L
108-90-7	Chlorobenzene	0.200U	0.200	0.00110	mg/L
<b>67-66-3</b>	<b>Chloroform</b>	<b>0.048J</b>	<b>0.200</b>	<b>0.00226</b>	<b>mg/L</b>
127-18-4	Tetrachloroethene	0.200U	0.200	0.00484	mg/L
<b>79-01-6</b>	<b>Trichloroethene</b>	<b>0.047J</b>	<b>0.200</b>	<b>0.00247</b>	<b>mg/L</b>
75-01-4	Vinyl chloride	0.200U	0.200	0.00372	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2000	1920	ug/L	96	62 - 130
1868-53-7	Dibromofluoromethane	2000	2030	ug/L	102	65 - 127
2037-26-5	Toluene d8	2000	1830	ug/L	92	71 - 134
17060-07-0	1,2-Dichloroethane-d4	2000	1670	ug/L	84	62 - 127

## SW-846 1010 Flashpoint

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/15/2010 13:42	MDT	429555

CAS#	Parameter	Result	RDL	MDL	Units
000000-01-3	FlashPoint	>170	50	50	Deg F

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122911	T21	Water	04/07/2010 15:00	04/09/2010 12:06

## SW-846 8260B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			500	04/16/2010 00:39	RJU	429573

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.500U	0.500	0.082	mg/L
<b>107-06-2</b>	<b>1,2-Dichloroethane</b>	<b>22.1</b>	<b>0.500</b>	<b>0.043</b>	<b>mg/L</b>
78-93-3	2-Butanone	12.5U	12.5	0.047	mg/L
<b>71-43-2</b>	<b>Benzene</b>	<b>1.16</b>	<b>0.500</b>	<b>0.027</b>	<b>mg/L</b>
56-23-5	Carbon tetrachloride	0.500U	0.500	0.074	mg/L
108-90-7	Chlorobenzene	0.500U	0.500	0.014	mg/L
<b>67-66-3</b>	<b>Chloroform</b>	<b>43.4</b>	<b>2.50</b>	<b>0.028</b>	<b>mg/L</b>
127-18-4	Tetrachloroethene	0.500U	0.500	0.061	mg/L
79-01-6	Trichloroethene	0.500U	0.500	0.031	mg/L
75-01-4	Vinyl chloride	0.500U	0.500	0.047	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	25000	26100	ug/L	104	62 - 130
1868-53-7	Dibromofluoromethane	25000	24700	ug/L	99	65 - 127
2037-26-5	Toluene d8	25000	23600	ug/L	94	71 - 134
17060-07-0	1,2-Dichloroethane-d4	25000	24100	ug/L	96	62 - 127

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122912	T22	Solid	04/07/2010 10:15	04/09/2010 12:06

## SW-846 8260B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			40	04/16/2010 01:03	RJU	429573

CAS#	Parameter	Result	RDL	MDL	Units
75-35-4	1,1-Dichloroethene	0.200U	0.200	0.00656	mg/L
107-06-2	1,2-Dichloroethane	0.200U	0.200	0.00344	mg/L
78-93-3	2-Butanone	0.200U	0.200	0.00373	mg/L
71-43-2	Benzene	0.200U	0.200	0.00217	mg/L
56-23-5	Carbon tetrachloride	0.200U	0.200	0.00592	mg/L
108-90-7	Chlorobenzene	0.200U	0.200	0.00110	mg/L
<b>67-66-3</b>	<b>Chloroform</b>	<b>0.052J</b>	<b>0.200</b>	<b>0.00226</b>	<b>mg/L</b>
127-18-4	Tetrachloroethene	0.200U	0.200	0.00484	mg/L
79-01-6	Trichloroethene	0.200U	0.200	0.00247	mg/L
75-01-4	Vinyl chloride	0.200U	0.200	0.00372	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2000	2040	ug/L	102	62 - 130
1868-53-7	Dibromofluoromethane	2000	2020	ug/L	101	65 - 127
2037-26-5	Toluene d8	2000	1980	ug/L	99	71 - 134
17060-07-0	1,2-Dichloroethane-d4	2000	1870	ug/L	94	62 - 127

## SW-846 8270C TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/16/2010 08:00	429512	3510C	1	04/16/2010 15:32	KCB	429591

CAS#	Parameter	Result	RDL	MDL	Units
106-46-7	1,4-Dichlorobenzene	0.0500U	0.0500	0.0006	mg/L
95-95-4	2,4,5-Trichlorophenol	0.0500U	0.0500	0.0006	mg/L
88-06-2	2,4,6-Trichlorophenol	0.0500U	0.0500	0.0008	mg/L
121-14-2	2,4-Dinitrotoluene	0.0500U	0.0500	0.0012	mg/L
1319-77-3	Cresols	0.1000U	0.1000	0.0024	mg/L
118-74-1	Hexachlorobenzene	0.0500U	0.0500	0.0013	mg/L
87-68-3	Hexachlorobutadiene	0.0500U	0.0500	0.0011	mg/L
67-72-1	Hexachloroethane	0.0500U	0.0500	0.0055	mg/L
98-95-3	Nitrobenzene	0.0500U	0.0500	0.0011	mg/L
87-86-5	Pentachlorophenol	0.2500U	0.2500	0.0076	mg/L
110-86-1	Pyridine	0.0500U	0.0500	0.0077	mg/L
1319-77-3MP	m,p-Cresol	0.0500U	0.0500	0.0017	mg/L
95-48-7	o-Cresol	0.0500U	0.0500	0.0009	mg/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	250	244	ug/L	98	48 - 123
321-60-8	2-Fluorobiphenyl	250	247	ug/L	99	16 - 128
1718-51-0	Terphenyl-d14	250	182	ug/L	73	38 - 167
4165-62-2	Phenol-d5	500	211	ug/L	42	10 - 123
367-12-4	2-Fluorophenol	500	313	ug/L	63	10 - 120
118-79-6	2,4,6-Tribromophenol	500	512	ug/L	102	44 - 121

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21004122912	T22	Solid	04/07/2010 10:15	04/09/2010 12:06

## SW-846 6010B TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429507	SW-846 3010A	1	04/15/2010 23:56	CLB	429524

CAS#	Parameter	Result	RDL	MDL	Units
7440-38-2	Arsenic	0.20U	0.20	0.0030	mg/L
<b>7440-39-3</b>	<b>Barium</b>	<b>0.47B</b>	<b>1.00</b>	<b>0.00031</b>	<b>mg/L</b>
7440-43-9	Cadmium	0.010U	0.010	0.00016	mg/L
7440-47-3	Chromium	0.050U	0.050	0.00032	mg/L
<b>7439-92-1</b>	<b>Lead</b>	<b>0.0028B</b>	<b>0.10</b>	<b>0.0015</b>	<b>mg/L</b>
<b>7782-49-2</b>	<b>Selenium</b>	<b>0.041B</b>	<b>0.10</b>	<b>0.0037</b>	<b>mg/L</b>
<b>7440-22-4</b>	<b>Silver</b>	<b>0.0036B</b>	<b>0.050</b>	<b>0.00058</b>	<b>mg/L</b>

## SW-846 7470A TCLP

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
04/15/2010 08:45	429508	SW-846 7470A	1	04/15/2010 12:14	TEA	429521

CAS#	Parameter	Result	RDL	MDL	Units
7439-97-6	Mercury	0.0020U	0.0020	0.000055	mg/L

## SW-846 1010 Flashpoint

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	04/15/2010 13:42	MDT	429555

CAS#	Parameter	Result	RDL	MDL	Units
000000-01-3	FlashPoint	>170	50	50	Deg F

RESULTS REPORTED ON A WET WEIGHT BASIS

# GC/MS Volatiles Quality Control Summary

Analytical Batch 429573 Prep Batch N/A		Client ID MB429573 GCAL ID 819322 Sample Type Method Blank Analytical Date 04/15/2010 20:57 Matrix Water			LCS429573 819323 LCS 04/15/2010 19:11 Water			LCSD429573 819324 LCSD 04/15/2010 19:34 Water			
SW-846 8260B TCLP		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
56-23-5	Carbon tetrachloride	0.00500U	0.00500	0.050	0.045	90	76 - 128	0.048	97	6	30
67-66-3	Chloroform	0.00500U	0.00500	0.050	0.045	91	75 - 122	0.049	99	9	30
107-06-2	1,2-Dichloroethane	0.00500U	0.00500	0.050	0.045	89	71 - 129	0.048	96	6	30
78-93-3	2-Butanone	0.025U	0.025	0.050	0.042	84	58 - 137	0.048	95	13	30
127-18-4	Tetrachloroethene	0.00500U	0.00500	0.050	0.048	95	68 - 128	0.048	96	0	30
75-01-4	Vinyl chloride	0.00100U	0.00100	0.050	0.041	83	68 - 132	0.046	92	11	30
75-35-4	1,1-Dichloroethene	0.00500U	0.00500	0.050	0.045	90	69 - 129	0.046	91	2	20
71-43-2	Benzene	0.00500U	0.00500	0.050	0.046	91	70 - 129	0.050	100	8	20
79-01-6	Trichloroethene	0.00500U	0.00500	0.050	0.048	96	76 - 129	0.049	98	2	20
108-90-7	Chlorobenzene	0.00500U	0.00500	0.050	0.046	91	74 - 123	0.052	103	12	20
<b>Surrogate</b>											
460-00-4	4-Bromofluorobenzene	46.8	94	50	48.4	97	62 - 130	45.9	92		
1868-53-7	Dibromofluoromethane	49	98	50	49.4	99	65 - 127	48.7	97		
2037-26-5	Toluene d8	46.8	94	50	48.9	98	71 - 134	44.5	89		
17060-07-0	1,2-Dichloroethane-d4	46.2	92	50	48.8	98	62 - 127	46	92		

Analytical Batch 429573 Prep Batch N/A		Client ID T6 GCAL ID 21004122903 Sample Type SAMPLE Analytical Date 04/15/2010 21:35 Matrix Water			T6 MS 21004122904 MS 04/15/2010 22:42 Water			T6 MSD 21004122905 MSD 04/15/2010 23:04 Water			
SW-846 8260B TCLP		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
75-35-4	1,1-Dichloroethene	0.00	0.500	5.00	4.26	85	69 - 129	4.42	88	4	30
107-06-2	1,2-Dichloroethane	6.91	0.500	5.00	10.6	74	71 - 129	9.17	45*	14	30
78-93-3	2-Butanone	0.00	2.50	5.00	3.58	72	58 - 137	3.60	72	0.6	30
71-43-2	Benzene	0.802	0.500	5.00	5.24	89	70 - 129	5.14	87	2	30
56-23-5	Carbon tetrachloride	0.00	0.500	5.00	4.24	85	76 - 128	4.44	89	5	30
108-90-7	Chlorobenzene	0.00	0.500	5.00	4.40	88	74 - 123	4.51	90	2	30
67-66-3	Chloroform	5.36	0.500	5.00	8.71	67*	75 - 122	7.36	40*	17	30
127-18-4	Tetrachloroethene	0.00	0.500	5.00	4.64	93	68 - 128	4.57	91	2	30
79-01-6	Trichloroethene	0.245	0.500	5.00	4.57	87	76 - 129	4.45	84	3	30

# GC/MS Volatiles Quality Control Summary

<b>Analytical Batch</b> 429573 <b>Prep Batch</b> N/A		<b>Client ID</b> T6 <b>GCAL ID</b> 21004122903 <b>Sample Type</b> SAMPLE <b>Analytical Date</b> 04/15/2010 21:35 <b>Matrix</b> Water	<b>T6 MS</b> 21004122904 MS 04/15/2010 22:42 Water					<b>T6 MSD</b> 21004122905 MSD 04/15/2010 23:04 Water			
<b>SW-846 8260B TCLP</b>		<b>Units</b> <b>Result</b>	<b>mg/L</b> <b>RDL</b>	<b>Spike</b> <b>Added</b>	<b>Result</b>	<b>% R</b>	<b>Control</b> <b>Limits % R</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>RPD</b> <b>Limit</b>
75-01-4	Vinyl chloride	0.00	0.100	5.00	4.37	87	68 - 132	4.34	87	0.7	30
<b>Surrogate</b>											
460-00-4	4-Bromofluorobenzene	5020	100	5000	5030	101	62 - 130	4910	98		
1868-53-7	Dibromofluoromethane	5010	100	5000	4800	96	65 - 127	4990	100		
2037-26-5	Toluene d8	5010	100	5000	4980	100	71 - 134	5100	102		
17060-07-0	1,2-Dichloroethane-d4	4600	92	5000	4610	92	62 - 127	4660	93		

# GC/MS Semi-Volatiles Quality Control Summary

<b>Analytical Batch</b> 429591 <b>Prep Batch</b> 429512 <b>Prep Method</b> 3510C		<b>Client ID</b> MB429512 <b>GCAL ID</b> 818949 <b>Sample Type</b> Method Blank <b>Prep Date</b> 04/16/2010 08:00 <b>Analytical Date</b> 04/16/2010 13:10 <b>Matrix</b> Water			LCS429512 818950 LCS 04/16/2010 08:00 04/16/2010 13:25 Water			LCSD429512 818951 LCSD 04/16/2010 08:00 04/16/2010 13:41 Water			
<b>SW-846 8270C TCLP</b>		<b>Units</b>	mg/L	<b>Spike</b>	<b>Result</b>		<b>Control</b>	<b>Result</b>			<b>RPD</b>
		<b>Result</b>	<b>RDL</b>	<b>Added</b>		<b>% R</b>	<b>Limits % R</b>		<b>% R</b>	<b>RPD</b>	<b>Limit</b>
118-74-1	Hexachlorobenzene	0.0500U	0.0500								
87-68-3	Hexachlorobutadiene	0.0500U	0.0500								
67-72-1	Hexachloroethane	0.0500U	0.0500								
95-48-7	o-Cresol	0.0500U	0.0500								
98-95-3	Nitrobenzene	0.0500U	0.0500								
95-95-4	2,4,5-Trichlorophenol	0.0500U	0.0500								
88-06-2	2,4,6-Trichlorophenol	0.0500U	0.0500								
110-86-1	Pyridine	0.0500U	0.0500								
1319-77-3	Cresols	0.1000U	0.1000								
1319-77-3MP	m,p-Cresol	0.0500U	0.0500								
106-46-7	1,4-Dichlorobenzene	0.0500U	0.0500	0.100	0.095	95	22 - 120	0.086	86	10	30
121-14-2	2,4-Dinitrotoluene	0.0500U	0.0500	0.100	0.110	110	37 - 138	0.108	108	2	33
87-86-5	Pentachlorophenol	0.2500U	0.2500	0.100	0.070	70	25 - 158	0.074	74	6	32
<b>Surrogate</b>											
4165-60-0	Nitrobenzene-d5	41.5	83	50	50.5	101	48 - 123	47.4	95		
321-60-8	2-Fluorobiphenyl	40.6	81	50	50.6	101	16 - 128	44.6	89		
1718-51-0	Terphenyl-d14	31.8	64	50	39.2	78	38 - 167	36.6	73		
4165-62-2	Phenol-d5	28.8	29	100	35.4	35	10 - 123	33.2	33		
367-12-4	2-Fluorophenol	44.5	45	100	52.2	52	10 - 120	45.7	46		
118-79-6	2,4,6-Tribromophenol	93.8	94	100	112	112	44 - 121	106	106		

<b>Analytical Batch</b> 429591 <b>Prep Batch</b> 429512 <b>Prep Method</b> 3510C		<b>Client ID</b> T6 <b>GCAL ID</b> 21004122903 <b>Sample Type</b> SAMPLE <b>Prep Date</b> 04/16/2010 08:00 <b>Analytical Date</b> 04/16/2010 14:28 <b>Matrix</b> Water	T6 MS 21004122904 MS 04/16/2010 08:00 04/16/2010 14:44 Water					T6 MSD 21004122905 MSD 04/16/2010 08:00 04/16/2010 15:00 Water				
<b>SW-846 8270C TCLP</b>			<b>Units</b>	mg/L	<b>Spike</b>		<b>Control</b>				<b>RPD</b>	
			<b>Result</b>	<b>RDL</b>	<b>Added</b>	<b>Result</b>	<b>% R</b>	<b>Limits % R</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>Limit</b>
106-46-7	1,4-Dichlorobenzene		0.00	0.0500	0.500	0.414	83	22 - 120	0.470	94	13	30
121-14-2	2,4-Dinitrotoluene		0.00	0.0500	0.500	0.527	105	37 - 138	0.527	105	0	33

# GC/MS Semi-Volatiles Quality Control Summary

<b>Analytical Batch</b> 429591 <b>Prep Batch</b> 429512 <b>Prep Method</b> 3510C		<b>Client ID</b> T6 <b>GCAL ID</b> 21004122903 <b>Sample Type</b> SAMPLE <b>Prep Date</b> 04/16/2010 08:00 <b>Analytical Date</b> 04/16/2010 14:28 <b>Matrix</b> Water			<b>T6 MS</b> 21004122904 MS 04/16/2010 08:00 04/16/2010 14:44 Water			<b>T6 MSD</b> 21004122905 MSD 04/16/2010 08:00 04/16/2010 15:00 Water						
<b>SW-846 8270C TCLP</b>					<b>Units</b>	mg/L	<b>Spike</b>	<b>Result</b>	<b>% R</b>	<b>Control</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>RPD</b>
					<b>Result</b>	<b>RDL</b>	<b>Added</b>			<b>Limits % R</b>				<b>Limit</b>
87-86-5 Pentachlorophenol		0.00	0.2500	0.500	0.403	81	25 - 158	0.424	85	5	32			
<b>Surrogate</b>														
4165-60-0 Nitrobenzene-d5		218	87	250	229	92	48 - 123	244	98					
321-60-8 2-Fluorobiphenyl		212	85	250	239	96	16 - 128	245	98					
1718-51-0 Terphenyl-d14		174	70	250	182	73	38 - 167	181	72					
4165-62-2 Phenol-d5		227	45	500	219	44	10 - 123	222	44					
367-12-4 2-Fluorophenol		311	62	500	287	57	10 - 120	307	61					
118-79-6 2,4,6-Tribromophenol		496	99	500	532	106	44 - 121	512	102					

# General Chromatography Quality Control Summary

<b>Analytical Batch</b> 429750 <b>Prep Batch</b> 429379 <b>Prep Method</b> TNRCC 1005		<b>Client ID</b> <b>GCAL ID</b> <b>Sample Type</b> <b>Prep Date</b> <b>Analytical Date</b> <b>Matrix</b>	MB429379 818201 Method Blank 04/16/2010 14:00 04/16/2010 14:07 Water	LCS429379 818202 LCS 04/16/2010 14:00 04/16/2010 14:37 Water			LCSD429379 818203 LCSD 04/16/2010 14:00 04/16/2010 15:08 Water					
<b>TX1005 Hydrocarbons by Range</b>			<b>Units</b> <b>Result</b>	ug/L <b>RDL</b>	<b>Spike</b> <b>Added</b>	<b>Result</b>	<b>% R</b>	<b>Control</b> <b>Limits % R</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>RPD</b> <b>Limit</b>
GCSV-05-01 C6-C12		142U	142	57700	47400	82	75 - 125	45200	78	5	20	
GCSV-05-02 >C12-C28		142U	142									
GCSV-05-03 >C28-C35		142U	142									
GCSV-05-04 Total TPH (C6-C35)		142U	142									
<b>Surrogate</b> 84-15-1 o-Terphenyl		20300	128	16000	18600	116	58 - 148	17000	105			

<b>Analytical Batch</b> 429794 <b>Prep Batch</b> 429379 <b>Prep Method</b> TNRCC 1005		<b>Client ID</b> <b>GCAL ID</b> <b>Sample Type</b> <b>Prep Date</b> <b>Analytical Date</b> <b>Matrix</b>	T6 21004122903 SAMPLE 04/16/2010 14:00 04/20/2010 11:18 Water			T6 MS 21004122904 MS 04/16/2010 14:00 04/20/2010 11:47 Water			T6 MSD 21004122905 MSD 04/16/2010 14:00 04/19/2010 18:19 Water					
TX1005 Hydrocarbons by Range					Units Result	ug/L RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit
GCSV-05-04    Total TPH (C6-C35)			0.00	145	59800	51600	86	75 - 125	51400	86	0.4	20		
<b>Surrogate</b>														
84-15-1        o-Terphenyl			18000	112	16600	19800	119	58 - 148	20800	126				

# Inorganics Quality Control Summary

<b>Analytical Batch</b> 429524 <b>Prep Batch</b> 429492 <b>Prep Method</b> SW-846 3010A		<b>Client ID</b> MB429492 <b>GCAL ID</b> 818811 <b>Sample Type</b> Method Blank <b>Prep Date</b> 04/15/2010 08:45 <b>Analytical Date</b> 04/15/2010 20:21 <b>Matrix</b> Water	LCS429492 818812 LCS 04/15/2010 08:45 04/15/2010 20:42 Water				
SW-846 6010B TCLP		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
7440-36-0	Antimony	0.060U	0.060	0.50	0.50	100	80 - 120
7440-38-2	Arsenic	0.20U	0.20	0.50	0.54	107	80 - 120
7440-39-3	Barium	1.00U	1.00	0.50	0.53	106	80 - 120
7440-41-7	Beryllium	0.0050U	0.0050	0.50	0.52	104	80 - 120
7440-43-9	Cadmium	0.010U	0.010	0.50	0.53	106	80 - 120
7440-47-3	Chromium	0.00091B	0.050	0.50	0.53	106	80 - 120
7439-92-1	Lead	0.10U	0.10	0.50	0.54	109	80 - 120
7440-02-0	Nickel	0.040U	0.040	0.50	0.53	106	80 - 120
7782-49-2	Selenium	0.10U	0.10	0.50	0.53	106	80 - 120
7440-22-4	Silver	0.050U	0.050	0.50	0.53	106	80 - 120

<b>Analytical Batch</b> 429524 <b>Prep Batch</b> 429507 <b>Prep Method</b> SW-846 3010A		<b>Client ID</b> MB429507 <b>GCAL ID</b> 818922 <b>Sample Type</b> Method Blank <b>Prep Date</b> 04/15/2010 08:45 <b>Analytical Date</b> 04/15/2010 23:28 <b>Matrix</b> Water	LCS429507 818923 LCS 04/15/2010 08:45 04/15/2010 23:35 Water				
SW-846 6010B TCLP		Units Result	mg/L RDL	Spike Added	Result	% R	Control Limits % R
7440-38-2	Arsenic	0.20U	0.20	0.50	0.51	102	80 - 120
7440-39-3	Barium	0.0012B	1.00	0.50	0.50	99	80 - 120
7440-43-9	Cadmium	0.010U	0.010	0.50	0.52	104	80 - 120
7440-47-3	Chromium	0.050U	0.050	0.50	0.50	99	80 - 120
7439-92-1	Lead	0.10U	0.10	0.50	0.50	99	80 - 120
7782-49-2	Selenium	0.032B	0.10	0.50	0.59	118	80 - 120
7440-22-4	Silver	0.0030B	0.050	0.50	0.51	102	80 - 120

# Inorganics Quality Control Summary

<b>Analytical Batch</b> 429524 <b>Prep Batch</b> 429492 <b>Prep Method</b> SW-846 3010A		<b>Client ID</b> T6 <b>GCAL ID</b> 21004122903 <b>Sample Type</b> SAMPLE <b>Prep Date</b> 04/15/2010 08:45 <b>Analytical Date</b> 04/15/2010 20:48 <b>Matrix</b> Water	T6 MS 21004122904 MS 04/15/2010 08:45 04/15/2010 20:55 Water					T6 MSD 21004122905 MSD 04/15/2010 08:45 04/15/2010 21:02 Water			
<b>SW-846 6010B TCLP</b>		<b>Units</b> <b>Result</b>	mg/L <b>RDL</b>	<b>Spike</b> <b>Added</b>	<b>Result</b>	<b>% R</b>	<b>Control</b> <b>Limits % R</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>RPD</b> <b>Limit</b>
7440-36-0	Antimony	0.0	0.060	0.50	0.47	94	75 - 125	0.49	98	4	20
7440-38-2	Arsenic	0.016	0.20	0.50	0.53	102	75 - 125	0.55	106	4	20
7440-39-3	Barium	2.42	1.00	0.50	2.82	80	75 - 125	2.99	115	6	20
7440-41-7	Beryllium	0.0	0.0050	0.50	0.49	98	75 - 125	0.51	101	4	20
7440-43-9	Cadmium	0.0058	0.010	0.50	0.49	97	75 - 125	0.51	100	4	20
7440-47-3	Chromium	0.0021	0.050	0.50	0.49	97	75 - 125	0.50	100	2	20
7439-92-1	Lead	0.013	0.10	0.50	0.49	96	75 - 125	0.51	100	4	20
7440-02-0	Nickel	0.50	0.040	0.50	0.96	92	75 - 125	1.01	102	5	20
7782-49-2	Selenium	0.0	0.10	0.50	0.50	100	75 - 125	0.51	102	2	20
7440-22-4	Silver	0.0	0.050	0.50	0.49	98	75 - 125	0.51	103	4	20

<b>Analytical Batch</b> 429524 <b>Prep Batch</b> 429507 <b>Prep Method</b> SW-846 3010A		<b>Client ID</b> MARCH 2010 CHIP SAMPLE <b>GCAL ID</b> 21004122401 <b>Sample Type</b> SAMPLE <b>Prep Date</b> 04/15/2010 08:45 <b>Analytical Date</b> 04/15/2010 22:04 <b>Matrix</b> Solid	817987MS 818925 MS 04/15/2010 08:45 04/15/2010 22:11 Solid					817987MSD 818924 MSD 04/15/2010 08:45 04/15/2010 22:18 Solid			
<b>SW-846 6010B TCLP</b>		<b>Units</b> <b>Result</b>	mg/L <b>RDL</b>	<b>Spike</b> <b>Added</b>	<b>Result</b>	<b>% R</b>	<b>Control</b> <b>Limits % R</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>RPD</b> <b>Limit</b>
7440-38-2	Arsenic	0.0	0.20	0.50	0.52	103	75 - 125	0.51	102	2	20
7440-39-3	Barium	0.21	1.00	0.50	0.71	101	75 - 125	0.72	102	1	20
7440-43-9	Cadmium	0.00041	0.010	0.50	0.53	105	75 - 125	0.52	105	2	20
7440-47-3	Chromium	0.0	0.050	0.50	0.50	101	75 - 125	0.50	101	0	20
7439-92-1	Lead	2.55	0.10	0.50	3.06	102	75 - 125	3.07	104	0.3	20
7782-49-2	Selenium	0.020	0.10	0.50	0.60	116	75 - 125	0.58	113	3	20
7440-22-4	Silver	0.048	0.050	0.50	0.57	105	75 - 125	0.58	106	2	20

# Inorganics Quality Control Summary

<b>Analytical Batch</b> 429521 <b>Prep Batch</b> 429494 <b>Prep Method</b> SW-846 7470A	<b>Client ID</b> <b>GCAL ID</b> <b>Sample Type</b> <b>Prep Date</b> <b>Analytical Date</b> <b>Matrix</b>	MB429494 818820 Method Blank 04/15/2010 08:45 04/15/2010 11:53 Water	LCS429494 818821 LCS 04/15/2010 08:45 04/15/2010 11:55 Water				
<b>SW-846 7470A TCLP</b>		<b>Units</b> <b>Result</b>	mg/L <b>RDL</b>	<b>Spike</b> <b>Added</b>	<b>Result</b>	<b>% R</b>	<b>Control</b> <b>Limits % R</b>
7439-97-6 Mercury		0.0020U	0.0020	0.00500	0.00504	101	80 - 120

<b>Analytical Batch</b> 429521 <b>Prep Batch</b> 429508 <b>Prep Method</b> SW-846 7470A	<b>Client ID</b> <b>GCAL ID</b> <b>Sample Type</b> <b>Prep Date</b> <b>Analytical Date</b> <b>Matrix</b>	MB429508 818928 Method Blank 04/15/2010 08:45 04/15/2010 12:08 Water	LCS429508 818929 LCS 04/15/2010 08:45 04/15/2010 12:13 Water				
<b>SW-846 7470A TCLP</b>		<b>Units</b> <b>Result</b>	mg/L <b>RDL</b>	<b>Spike</b> <b>Added</b>	<b>Result</b>	<b>% R</b>	<b>Control</b> <b>Limits % R</b>
7439-97-6 Mercury		0.0020U	0.0020	0.00500	0.00482	96	80 - 120

<b>Analytical Batch</b> 429521 <b>Prep Batch</b> 429494 <b>Prep Method</b> SW-846 7470A	<b>Client ID</b> <b>GCAL ID</b> <b>Sample Type</b> <b>Prep Date</b> <b>Analytical Date</b> <b>Matrix</b>	T6 21004122903 SAMPLE 04/15/2010 08:45 04/15/2010 11:56 Water			T6 MS 21004122904 MS 04/15/2010 08:45 04/15/2010 11:58 Water			T6 MSD 21004122905 MSD 04/15/2010 08:45 04/15/2010 12:00 Water			
<b>SW-846 7470A TCLP</b>		<b>Units</b>	<b>mg/L</b>	<b>Spike</b>	<b>Result</b>	<b>% R</b>	<b>Control</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>RPD</b>
		<b>Result</b>	<b>RDL</b>	<b>Added</b>			<b>Limits % R</b>				<b>Limit</b>
7439-97-6 Mercury		0.00011	0.0020	0.00500	0.00527	103	75 - 125	0.00526	103	0.2	20

# Inorganics Quality Control Summary

<b>Analytical Batch</b> 429521 <b>Prep Batch</b> 429508 <b>Prep Method</b> SW-846 7470A		<b>Client ID</b> T22 <b>GCAL ID</b> 21004122912 <b>Sample Type</b> SAMPLE <b>Prep Date</b> 04/15/2010 08:45 <b>Analytical Date</b> 04/15/2010 12:14 <b>Matrix</b> Solid		818046MS 818930 MS 04/15/2010 08:45 04/15/2010 12:16 Solid			818046MSD 818931 MSD 04/15/2010 08:45 04/15/2010 12:17 Solid						
<b>SW-846 7470A TCLP</b>				<b>Units</b>	mg/L	<b>Spike</b>	<b>Result</b>	<b>% R</b>	<b>Control</b>	<b>Result</b>	<b>% R</b>	<b>RPD</b>	<b>RPD</b>
				<b>Result</b>	<b>RDL</b>	<b>Added</b>			<b>Limits % R</b>			<b>Limit</b>	
7439-97-6 Mercury				0.00000	0.0020	0.00500	0.00512	102	75 - 125	0.00508	102	0.8	20

# General Chemistry Quality Control Summary

Analytical Batch 429555 Prep Batch N/A		Client ID GCAL ID Sample Type Analytical Date Matrix	LCS429555 820399 LCS 04/15/2010 13:42 Solid			
SW-846 1010 Flashpoint		Spike Added	Result	% R	Control Limits % R	
000000-01-3 FlashPoint		90	91	101	97.8 -102.2	

# General Chemistry Quality Control Summary

<b>Analytical Batch</b> 429780 <b>Prep Batch</b> 429779 <b>Prep Method</b> EPA 1010		<b>Client ID</b> <b>GCAL ID</b> 21004091501 <b>Sample Type</b> SAMPLE <b>Prep Date</b> 04/20/2010 08:00 <b>Analytical Date</b> 04/20/2010 08:00 <b>Matrix</b> Solid	817500DUP 820745 DUP 04/20/2010 08:00 04/20/2010 08:00 Solid		
<b>ASTM D240 Heat of Combustion</b>		<b>Units</b> BTU/lb <b>Result</b> RDL	<b>Result</b>	<b>RPD</b>	<b>RPD Limit</b>
WET-014	Heat of Combustion	14197 90	13388	6	25

# General Chemistry Quality Control Summary

Analytical Batch 429420 Prep Batch N/A	Client ID	126127	816248DUP			
	GCAL ID	21004061901	818415			
	Sample Type	SAMPLE	DUP			
	Analytical Date	04/13/2010 09:38	04/13/2010 09:38			
	Matrix	Solid	Solid			
ASTM E203-96 WaterK		Units	%	Result		
		Result	RDL		RPD	RPD Limit
W-02-8	Karl Fisher H2O	11.2	0.100	11.7	4.37	25

GULF COAST ANALYTICAL LABORATORIES, INC.  
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402  
Phone 225.769.4900 • Fax 225.767.5717

Lab use only

Client Name Columbia Env

Client # 4142

Workorder # 210041275

Due Date 4-20-10

### Report to:

Client: Columbia Env. Services  
Address: 13222 Reeveson  
Houston, TX 77039  
Contact: Tony Maag  
Phone: 713-868-4845  
Fax: 281-442-1117

### Bill to:

Client: Same  
Address: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_

### Analytical Requests & Method

### Lab use only:

Custody Seal

used ☐ yes ☐ no

in tact ☐ yes ☐ no

Temperature °C 1.2

P.O. Number 10-406-001 Project Name/Number Gulfco Marine

Sampled By: Tony Maag Robert Beltran

Matrix <sup>1</sup>	Date	Time (2400)	Preservatives	No Containers	Sample Description	Lab ID
Liq	4/6	1200	ice	2	T2	1
		300		3	T4	2
		400		5	T6	3 4 5
	4/7	1100		3	T13	6
		1400		2	T15	7
		1200		3	T16	8
		1000		2	T18	9
		1300		2	T19	10
		1500		2	T21	11
		1015		1	T22	12

Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week ☒ Standard ☐ Other

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Note:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

Relinquished by: (Signature)

Received by: (Signature)

Date:

Time:

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

DATA VALIDATION CHECKLIST (Level III)				
Client Name: Pastor, Behling, & Wheeler		Project Number: 1597B		
Property Location: Gulfco Superfund Site		Project Manager: Eric Pastor		
Laboratory: GCAL – Baton Rouge, LA		Laboratory Job No.: 211011405		
Reviewer: Taryn Scholz/ Don Flory (QAA, L.L.C.)		Date Checked: 2/22/11		
ITEM	Yes	No	NA	Comment Number
<b>Chain of Custody (COC) and Sample Receipt at Lab</b>				
1. Signed COCs included and seals used?	x			
2. Date and time of sample collection included?	x			
3. All samples listed on the COC analyzed for in accordance with the RI/FS Work Plan?			x	
4. Field QC sample frequency met project requirements?	x			
5. Sample receipt temperature 2-6°C?	x			
6. Samples preserved appropriately?	x			
7. Samples received within 2 days of collection?	x			
8. No problems noted?	x			
<b>Laboratory Report and Data Package</b>				
9. Signed Case Narrative included?	x			
10. No analytical discrepancies noted in case narrative?		x		10.
11. Elevated reporting limits justified?	x			11.
12. MDLs reasonable per MDL Check?	x			
13. Calibration data acceptable?		x		see Attachment 1
14. ICV and CCV recoveries within project control limits?		x		see Attachment 1
15. ICB and CCB results <RL (MQL)?			x	
16. Internal standard areas within project control limits?	x			
<b>Laboratory EDD</b>				
17. Field sample IDs included?	x			
18. Laboratory sample IDs included?	x			
19. Date of analysis included?	x			
20. Date of sample preparation included?	x			20.
21. Samples prepared within holding time?	x			
22. Samples analyzed within holding time?	x			
23. Detection limit and quantitation limit included?	x			
24. Project target limits achieved?		x		24.
25. No elevated reporting limits for NDs?		x		25.
26. Method references included?	x			
27. Sample matrix included?	x			
28. Sample result units reported correctly?	x			28.
29. Soil/ sediment results corrected for dry-weight?	x			
30. Method blank results <RL (MDL)?	x			
31. Equipment and Trip blank results <RL (MDL)?	x			
32. All COIs included in LCS?	x			32.
33. LCS recovery within project control limits?		x		see Attachment 1
34. MS/MSD recoveries within project control limits?		x		see Attachment 1
35. LCS/LCSD RPDs within project control limits?		x		see Attachment 1
36. MS/MSD RPDs within project control limits?		x		see Attachment 1
37. Laboratory duplicate RPDs/Diffs within project control limits?			x	
38. Field duplicate RPDs/Diffs within project control limits?		x		see Attachment 1
39. Surrogate recoveries within project control limits?		x		see Attachment 1
40. Completeness percentage within project limits?	x			

Definitions: <b>CCB</b> – Continuing Calibration Blank; <b>CCV</b> – Continuing Calibration Verification; <b>COI</b> – Compounds of Interest; <b>DCS</b> – Detectability Check Sample; <b>ICB</b> – Initial Calibration Blank; <b>ICV</b> – Initial Calibration Verification; <b>LCS</b> – Laboratory Control Sample; <b>LCSD</b> – Laboratory Control Sample Duplicate; <b>MDL</b> – Method Detection Limit; <b>MS/MSD</b> – Matrix Spike/Matrix Spike Duplicate; <b>RL</b> – Reporting Limit; <b>RPD</b> – Relative Percent Difference				
<b>COMMENTS</b>				
Level IV Check - GC/MS RRF for instrument calibration also included in Level III checks after deficiencies noted in first samples – see attached for deficiencies noted				
10. Issues noted for all parameters. All are based on laboratory limits, which do not affect flagging for this site.				
11. All VOC soil samples diluted (med level MeOH extraction and higher) to bracket TA concentrations in calibration range; SVOC sample 04 diluted (10x) to bracket a TA concentration in calibration range, SUs diluted out for this analysis (undiluted analysis also reported and it has acceptable surrogate recoveries)				
20. Note: QC Batch ID in EDD is for the analytical batch rather than the preparation batch as given for all previous EDDs.				
24. Actual MDLs are above the target MDLs for the following:				
	Target MDL (mg/kg)	Actual MDL (mg/kg)		
n-Butyl alcohol	0.0083	0.0183		
Benzidine	0.067	1.65		
Actual MQLs are above the target MQLs for the following:				
	Target MQL (mg/kg)	Actual MQL (mg/kg)		
Benzidine	1.32	1.65		
(Note: For n-Butyl alcohol, both the actual MDL and target MDL are below the comparison criteria. For Benzidine, neither the actual MDL nor the target MDL is below the comparison criteria, which is exceedingly low.)				
25. The VOC soil samples were analyzed as high level soils (50x dilution), some with additional dilution (up to 200x) for non-detects.				
28. Results, SDLs, and SQLs are in mg/kg dry-weight or mg/L as requested. However, the user should note that the MDLs and MQLs for organics are in ug/kg or ug/L. This is not accounted for in the Prep Factor or Dilution Factor, except for aqueous SVOC results.				
32. All analytes routinely spiked by lab are included as per QAPP. This is every TA except n-Butyl alcohol and Benzidine.				

**SET SUMMARY**  
**Laboratory Job No.: 211021405**

11	Number of Field Samples including Field Duplicates (1)
1	Number of Field MS/MSD Pairs
1	Number of Equipment Rinsate Blanks
0	Number of Field Blanks
2	Number of VOC Trip Blanks
2	Number of Parameters (VOC, SVOC)
145	Number of Target Analytes per Sample
1595	Total Measurements for Field Samples
1311	Number of measurements with no validation qualifier (i.e., "none" in EDD)
93	Number of measurements with UJ flag (for various analytes due to low laboratory and/or matrix spike recovery; poor calibration fit and/or negative drift)
32	Number of measurements with UJ flag and an elevated SDL (for 2-Chloroethylvinyl ether, Acrolein, and n-Butyl alcohol due to poor instrument response, i.e., low RRF)
0	Number of measurements with J- flag
120	Number of measurements with J flag (due solely to result being between the SDL and SQL)
23	Number of measurements with J flag (for 2-Methylnaphthalene, Acenaphthylene, and Isopropylbenzene (Cumene) due to poor field duplicate precision)
4	Number of measurements with J flag (for Pyrene due to result being between the SDL and SQL plus calibration positive drift)
1	Number of measurements with J+ flag (for Pyrene due to calibration positive drift)
0	Number of measurements with U flag
0	Number of measurements with NS flag
11	Number of measurements with R flag (for Benzaldehyde due to extremely low laboratory spike recovery (8.5%), low matrix spike recovery, and calibration negative drift)
100%	Completeness-to-date on a sample level (percentage of removal verification samples with usable data, project goal 90%)
0%	Completeness-to-date on an analyte level (percentage of removal verification samples with usable data for a specific analyte, project goal 80%) – Benzaldehyde
100%	Completeness-to-date on an analyte level (percentage of removal verification samples with usable data for a specific analyte, project goal 80%) – all other target analytes

Usability: All data is suitable as qualified for the intended use except the eleven results for Benzaldehyde (all non-detects). Data for 2-Chloroethylvinyl ether, Acrolein, and n-Butyl alcohol are usable with an elevated reporting limit for the non-detects (as given in the Electronic Data Deliverable).

## QUALIFIED DATA TABLE

Field Sample Identification	Analyte	Data Qualifier	Reason for Qualification
BLIND DUP	2-Chloroethylvinyl ether	UJ	low instrument response (low RRF), elevate SDL for NDs 210x (RV)
BLIND DUP	Acrolein	UJ	low instrument response (low RRF), elevate SDL for NDs 50x (RV); Low ave MS/MSD recovery (13.5%)
BLIND DUP	Benzene	J	result between SDL and SQL
BLIND DUP	Isopropylbenzene (Cumene)	J	poor field duplicate precision (57 RPD)
BLIND DUP	Naphthalene	J	result between SDL and SQL
BLIND DUP	n-Butyl alcohol	UJ	low instrument response (low RRF), elevate SDL for NDs 3x (RV)
BLIND DUP	Styrene	J	result between SDL and SQL
BLIND DUP	Toluene	J	result between SDL and SQL
BLIND DUP	Xylene (total)	J	result between SDL and SQL
BLIND DUP	2,4-Dinitrophenol	UJ	poor calibration fit (%RSD=31); Low ave MS/MSD recovery (58.5%)
BLIND DUP	2-Methylnaphthalene	J	poor field duplicate precision (74 RPD)
BLIND DUP	3,3'-Dichlorobenzidine	UJ	Low ave LCS/LCSD recovery (40.5%)
BLIND DUP	3-Nitroaniline	UJ	Low ave LCS/LCSD recovery (38.5%); Low ave MS/MSD recovery (55.5%)
BLIND DUP	4-Chloroaniline	UJ	Low ave LCS/LCSD recovery (26.5%); Low ave MS/MSD recovery (45%)
BLIND DUP	Acenaphthylene	J	large difference between field duplicate pair (> 3 x MQL)
BLIND DUP	Aniline	UJ	Low ave LCS/LCSD recovery (45.5%)
BLIND DUP	Anthracene	J	result between SDL and SQL
BLIND DUP	Benzaldehyde	R	Extremely low ave LCS/LCSD recovery (8.5%); Low ave MS/MSD recovery (9%); calibration drift (%D= -27)
BLIND DUP	Benzidine	UJ	poor calibration fit (%RSD=39); calibration drift (%D= -24)
BLIND DUP	Benzoic acid	UJ	calibration drift (%D= -21); Low ave MS/MSD recovery (51.5%)
BLIND DUP	Biphenyl	J	result between SDL and SQL
BLIND DUP	Diethyl phthalate	J	result between SDL and SQL
BLIND DUP	Fluoranthene	J	result between SDL and SQL
BLIND DUP	m,p-Cresol	J	result between SDL and SQL
BLIND DUP	o-Cresol	J	result between SDL and SQL
BLIND DUP	Pyridine	UJ	Low ave MS/MSD recovery (59%)
NC-0-0.3	1,1,1-Trichloroethane	J	result between SDL and SQL
NC-0-0.3	1,2,4-Trimethylbenzene	J	result between SDL and SQL
NC-0-0.3	1,3,5-Trimethylbenzene	J	result between SDL and SQL
NC-0-0.3	2-Chloroethylvinyl ether	UJ	low instrument response (low RRF), elevate SDL for NDs 210x (RV)
NC-0-0.3	Acrolein	UJ	low instrument response (low RRF), elevate SDL for NDs 50x (RV); Low ave MS/MSD recovery (13.5%)
NC-0-0.3	Benzene	J	result between SDL and SQL
NC-0-0.3	Cyclohexane	J	result between SDL and SQL
NC-0-0.3	Isopropylbenzene (Cumene)	J	poor field duplicate precision (57 RPD)
NC-0-0.3	m,p-Xylene	J	result between SDL and SQL
NC-0-0.3	Methylene chloride	J	result between SDL and SQL
NC-0-0.3	n-Butyl alcohol	UJ	low instrument response (low RRF), elevate SDL for NDs 3x (RV)
NC-0-0.3	o-Xylene	J	result between SDL and SQL
NC-0-0.3	Toluene	J	result between SDL and SQL
NC-0-0.3	Xylene (total)	J	result between SDL and SQL
NC-0-0.3	2,4-Dinitrophenol	UJ	poor calibration fit (%RSD=31); Low ave MS/MSD recovery (58.5%)
NC-0-0.3	2-Methylnaphthalene	J	poor field duplicate precision (74 RPD)
NC-0-0.3	3,3'-Dichlorobenzidine	UJ	Low ave LCS/LCSD recovery (40.5%)

## QUALIFIED DATA TABLE

Field Sample Identification	Analyte	Data Qualifier	Reason for Qualification
NC-0-0.3	3-Nitroaniline	UJ	Low ave LCS/LCSD recovery (38.5%); Low ave MS/MSD recovery (55.5%)
NC-0-0.3	4-Chloroaniline	UJ	Low ave LCS/LCSD recovery (26.5%); Low ave MS/MSD recovery (45%)
NC-0-0.3	Acenaphthene	J	result between SDL and SQL
NC-0-0.3	Acenaphthylene	J	large difference between field duplicate pair (> 3 x MQL); result between SDL and SQL
NC-0-0.3	Acetophenone	J	result between SDL and SQL
NC-0-0.3	Aniline	UJ	Low ave LCS/LCSD recovery (45.5%)
NC-0-0.3	Benzaldehyde	R	Extremely low ave LCS/LCSD recovery (8.5%); Low ave MS/MSD recovery (9%); calibration drift (%D= -27)
NC-0-0.3	Benzidine	UJ	poor calibration fit (%RSD=39); calibration drift (%D= -24)
NC-0-0.3	Benzo(b)fluoranthene	J	result between SDL and SQL
NC-0-0.3	Benzo(g,h,i)perylene	J	result between SDL and SQL
NC-0-0.3	Benzo(k)fluoranthene	J	result between SDL and SQL
NC-0-0.3	Benzoic acid	UJ	calibration drift (%D= -21); Low ave MS/MSD recovery (51.5%)
NC-0-0.3	Biphenyl	J	result between SDL and SQL
NC-0-0.3	Chrysene	J	result between SDL and SQL
NC-0-0.3	Indeno(1,2,3-cd)pyrene	J	result between SDL and SQL
NC-0-0.3	Pyrene	J	calibration drift (%D= 27); result between SDL and SQL
NC-0-0.3	Pyridine	UJ	Low ave MS/MSD recovery (59%)
SC-E	1,2,4-Trimethylbenzene	J	result between SDL and SQL
SC-E	2-Chloroethylvinyl ether	UJ	low instrument response (low RRF), elevate SDL for NDs 210x (RV)
SC-E	Acrolein	UJ	low instrument response (low RRF), elevate SDL for NDs 50x (RV); Low ave MS/MSD recovery (13.5%)
SC-E	Cyclohexane	J	result between SDL and SQL
SC-E	Ethylbenzene	J	result between SDL and SQL
SC-E	Isopropylbenzene (Cumene)	J	poor field duplicate precision (57 RPD)
SC-E	m,p-Xylene	J	result between SDL and SQL
SC-E	Naphthalene	J	result between SDL and SQL
SC-E	n-Butyl alcohol	UJ	low instrument response (low RRF), elevate SDL for NDs 3x (RV)
SC-E	o-Xylene	J	result between SDL and SQL
SC-E	Xylene (total)	J	result between SDL and SQL
SC-E	2,4-Dinitrophenol	UJ	poor calibration fit (%RSD=31); Low ave MS/MSD recovery (58.5%)
SC-E	2-Methylnaphthalene	J	poor field duplicate precision (74 RPD); result between SDL and SQL
SC-E	3,3'-Dichlorobenzidine	UJ	Low ave LCS/LCSD recovery (40.5%)
SC-E	3-Nitroaniline	UJ	Low ave LCS/LCSD recovery (38.5%); Low ave MS/MSD recovery (55.5%)
SC-E	4-Chloroaniline	UJ	Low ave LCS/LCSD recovery (26.5%); Low ave MS/MSD recovery (45%)
SC-E	Acenaphthylene	UJ	large difference between field duplicate pair (> 3 x MQL)
SC-E	Aniline	UJ	Low ave LCS/LCSD recovery (45.5%)
SC-E	Anthracene	J	result between SDL and SQL
SC-E	Benzaldehyde	R	Extremely low ave LCS/LCSD recovery (8.5%); Low ave MS/MSD recovery (9%); calibration drift (%D= -27)
SC-E	Benzidine	UJ	poor calibration fit (%RSD=39); calibration drift (%D= -24)
SC-E	Benzo(a)anthracene	J	result between SDL and SQL
SC-E	Benzo(a)pyrene	J	result between SDL and SQL
SC-E	Benzo(b)fluoranthene	J	result between SDL and SQL
SC-E	Benzo(g,h,i)perylene	J	result between SDL and SQL
SC-E	Benzo(k)fluoranthene	J	result between SDL and SQL

## QUALIFIED DATA TABLE

Field Sample Identification	Analyte	Data Qualifier	Reason for Qualification
SC-E	Benzoic acid	UJ	calibration drift (%D= -21); Low ave MS/MSD recovery (51.5%)
SC-E	Chrysene	J	result between SDL and SQL
SC-E	Fluoranthene	J	result between SDL and SQL
SC-E	Fluorene	J	result between SDL and SQL
SC-E	Indeno(1,2,3-cd)pyrene	J	result between SDL and SQL
SC-E	Phenanthrene	J	result between SDL and SQL
SC-E	Pyrene	J	calibration drift (%D= 27); result between SDL and SQL
SC-E	Pyridine	UJ	Low ave MS/MSD recovery (59%)
SC-W	1,2,4-Trimethylbenzene	J	result between SDL and SQL
SC-W	1,3,5-Trimethylbenzene	J	result between SDL and SQL
SC-W	2-Chloroethylvinyl ether	UJ	low instrument response (low RRF), elevate SDL for NDs 210x (RV)
SC-W	Acrolein	UJ	low instrument response (low RRF), elevate SDL for NDs 50x (RV); Low ave MS/MSD recovery (13.5%)
SC-W	Benzene	J	result between SDL and SQL
SC-W	Cyclohexane	J	result between SDL and SQL
SC-W	Ethylbenzene	J	result between SDL and SQL
SC-W	Isopropylbenzene (Cumene)	J	poor field duplicate precision (57 RPD)
SC-W	m,p-Xylene	J	result between SDL and SQL
SC-W	Naphthalene	J	result between SDL and SQL
SC-W	n-Butyl alcohol	UJ	low instrument response (low RRF), elevate SDL for NDs 3x (RV)
SC-W	o-Xylene	J	result between SDL and SQL
SC-W	Xylene (total)	J	result between SDL and SQL
SC-W	2,4-Dinitrophenol	UJ	poor calibration fit (%RSD=31); Low ave MS/MSD recovery (58.5%)
SC-W	3,3'-Dichlorobenzidine	UJ	Low ave LCS/LCSD recovery (40.5%)
SC-W	3-Nitroaniline	UJ	Low ave LCS/LCSD recovery (38.5%); Low ave MS/MSD recovery (55.5%)
SC-W	4-Chloroaniline	UJ	Low ave LCS/LCSD recovery (26.5%); Low ave MS/MSD recovery (45%)
SC-W	Acenaphthylene	J	large difference between field duplicate pair (> 3 x MQL); result between SDL and SQL
SC-W	Aniline	UJ	Low ave LCS/LCSD recovery (45.5%)
SC-W	Anthracene	J	result between SDL and SQL
SC-W	Benzaldehyde	R	Extremely low ave LCS/LCSD recovery (8.5%); Low ave MS/MSD recovery (9%); calibration drift (%D= -27)
SC-W	Benzidine	UJ	poor calibration fit (%RSD=39); calibration drift (%D= -24)
SC-W	Benzo(b)fluoranthene	J	result between SDL and SQL
SC-W	Benzo(g,h,i)perylene	J	result between SDL and SQL
SC-W	Benzo(k)fluoranthene	J	result between SDL and SQL
SC-W	Benzoic acid	UJ	calibration drift (%D= -21); Low ave MS/MSD recovery (51.5%)
SC-W	Chrysene	J	result between SDL and SQL
SC-W	Diethyl phthalate	J	result between SDL and SQL
SC-W	Fluoranthene	J	result between SDL and SQL
SC-W	Indeno(1,2,3-cd)pyrene	J	result between SDL and SQL
SC-W	Pyrene	J	calibration drift (%D= 27); result between SDL and SQL
SC-W	Pyridine	UJ	Low ave MS/MSD recovery (59%)
T-15-F	2-Chloroethylvinyl ether	UJ	low instrument response (low RRF), elevate SDL for NDs 210x (RV)
T-15-F	Acrolein	UJ	low instrument response (low RRF), elevate SDL for NDs 50x (RV); Low ave MS/MSD recovery (13.5%)
T-15-F	cis-1,2-Dichloroethene	J	result between SDL and SQL
T-15-F	n-Butyl alcohol	UJ	low instrument response (low RRF), elevate SDL for NDs 3x (RV)
T-15-F	Trichloroethene	J	result between SDL and SQL

## QUALIFIED DATA TABLE

Field Sample Identification	Analyte	Data Qualifier	Reason for Qualification
T-15-F	2,4-Dinitrophenol	UJ	poor calibration fit (%RSD=31); Low ave MS/MSD recovery (58.5%)
T-15-F	3,3'-Dichlorobenzidine	UJ	Low ave LCS/LCSD recovery (40.5%)
T-15-F	3-Nitroaniline	UJ	Low ave LCS/LCSD recovery (38.5%); Low ave MS/MSD recovery (55.5%)
T-15-F	4-Chloroaniline	UJ	Low ave LCS/LCSD recovery (26.5%); Low ave MS/MSD recovery (45%)
T-15-F	Acenaphthylene	UJ	large difference between field duplicate pair (> 3 x MQL)
T-15-F	Aniline	UJ	Low ave LCS/LCSD recovery (45.5%)
T-15-F	Benzaldehyde	R	Extremely low ave LCS/LCSD recovery (8.5%); Low ave MS/MSD recovery (9%); calibration drift (%D= -27)
T-15-F	Benzidine	UJ	poor calibration fit (%RSD=39); calibration drift (%D= -24)
T-15-F	Benzoic acid	UJ	calibration drift (%D= -21); Low ave MS/MSD recovery (51.5%)
T-15-F	Fluoranthene	J	result between SDL and SQL
T-15-F	Pyridine	UJ	Low ave MS/MSD recovery (59%)
T-21-F	1,2,4-Trimethylbenzene	J	result between SDL and SQL
T-21-F	2-Chloroethylvinyl ether	UJ	low instrument response (low RRF), elevate SDL for NDs 210x (RV)
T-21-F	Acrolein	UJ	low instrument response (low RRF), elevate SDL for NDs 50x (RV); Low ave MS/MSD recovery (13.5%)
T-21-F	cis-1,2-Dichloroethene	J	result between SDL and SQL
T-21-F	Cyclohexane	J	result between SDL and SQL
T-21-F	Hexachlorobutadiene	J	result between SDL and SQL
T-21-F	Isopropylbenzene (Cumene)	J	poor field duplicate precision (57 RPD); result between SDL and SQL
T-21-F	Naphthalene	J	result between SDL and SQL
T-21-F	n-Butyl alcohol	UJ	low instrument response (low RRF), elevate SDL for NDs 3x (RV)
T-21-F	Trichloroethene	J	result between SDL and SQL
T-21-F	2,4-Dinitrophenol	UJ	poor calibration fit (%RSD=31); Low ave MS/MSD recovery (58.5%)
T-21-F	2-Methylnaphthalene	J	poor field duplicate precision (74 RPD)
T-21-F	3,3'-Dichlorobenzidine	UJ	Low ave LCS/LCSD recovery (40.5%)
T-21-F	3-Nitroaniline	UJ	Low ave LCS/LCSD recovery (38.5%); Low ave MS/MSD recovery (55.5%)
T-21-F	4-Chloroaniline	UJ	Low ave LCS/LCSD recovery (26.5%); Low ave MS/MSD recovery (45%)
T-21-F	Acenaphthylene	J	large difference between field duplicate pair (> 3 x MQL); result between SDL and SQL
T-21-F	Aniline	UJ	Low ave LCS/LCSD recovery (45.5%)
T-21-F	Benzaldehyde	R	Extremely low ave LCS/LCSD recovery (8.5%); Low ave MS/MSD recovery (9%); calibration drift (%D= -27)
T-21-F	Benzidine	UJ	poor calibration fit (%RSD=39); calibration drift (%D= -24)
T-21-F	Benzo(b)fluoranthene	J	result between SDL and SQL
T-21-F	Benzo(g,h,i)perylene	J	result between SDL and SQL
T-21-F	Benzo(k)fluoranthene	J	result between SDL and SQL
T-21-F	Benzoic acid	UJ	calibration drift (%D= -21); Low ave MS/MSD recovery (51.5%)
T-21-F	Biphenyl	J	result between SDL and SQL
T-21-F	Chrysene	J	result between SDL and SQL
T-21-F	Fluoranthene	J	result between SDL and SQL
T-21-F	Indeno(1,2,3-cd)pyrene	J	result between SDL and SQL
T-21-F	Pyrene	J+	calibration drift (%D= 27)
T-21-F	Pyridine	UJ	Low ave MS/MSD recovery (59%)
T-2-WEST	Acrolein	UJ	low instrument response (low RRF), elevate SDL for NDs 13x (RV); Low ave MS/MSD recovery (13.5%)
T-2-WEST	Isopropylbenzene (Cumene)	J	poor field duplicate precision (57 RPD)

## QUALIFIED DATA TABLE

Field Sample Identification	Analyte	Data Qualifier	Reason for Qualification
T-2-WEST	n-Butyl alcohol	UJ	low instrument response (low RRF), elevate SDL for NDs 1.4x (RV)
T-2-WEST	Vinyl acetate	UJ	calibration drift (%D= -27)
T-2-WEST	2,4-Dinitrophenol	UJ	poor calibration fit (%RSD=31); Low ave MS/MSD recovery (58.5%)
T-2-WEST	3,3'-Dichlorobenzidine	UJ	Low ave LCS/LCSD recovery (40.5%)
T-2-WEST	3-Nitroaniline	UJ	Low ave LCS/LCSD recovery (38.5%); Low ave MS/MSD recovery (55.5%)
T-2-WEST	4-Chloroaniline	UJ	Low ave LCS/LCSD recovery (26.5%); Low ave MS/MSD recovery (45%)
T-2-WEST	Acenaphthylene	UJ	large difference between field duplicate pair (> 3 x MQL)
T-2-WEST	Aniline	UJ	Low ave LCS/LCSD recovery (45.5%)
T-2-WEST	Benzaldehyde	R	Extremely low ave LCS/LCSD recovery (8.5%); Low ave MS/MSD recovery (9%); calibration drift (%D= -27)
T-2-WEST	Benzidine	UJ	poor calibration fit (%RSD=39); calibration drift (%D= -24)
T-2-WEST	Benzoic acid	UJ	calibration drift (%D= -21); Low ave MS/MSD recovery (51.5%)
T-2-WEST	Biphenyl	J	result between SDL and SQL
T-2-WEST	Di-n-butyl phthalate	J	result between SDL and SQL
T-2-WEST	Fluorene	J	result between SDL and SQL
T-2-WEST	Phenanthrene	J	result between SDL and SQL
T-2-WEST	Pyridine	UJ	Low ave MS/MSD recovery (59%)
T-6-EAST	2-Chloroethylvinyl ether	UJ	low instrument response (low RRF), elevate SDL for NDs 210x (RV)
T-6-EAST	Acrolein	UJ	low instrument response (low RRF), elevate SDL for NDs 50x (RV); Low ave MS/MSD recovery (13.5%)
T-6-EAST	Benzene	J	result between SDL and SQL
T-6-EAST	Isopropylbenzene (Cumene)	J	poor field duplicate precision (57 RPD)
T-6-EAST	n-Butyl alcohol	UJ	low instrument response (low RRF), elevate SDL for NDs 3x (RV)
T-6-EAST	Styrene	J	result between SDL and SQL
T-6-EAST	Toluene	J	result between SDL and SQL
T-6-EAST	2,4-Dinitrophenol	UJ	poor calibration fit (%RSD=31); Low ave MS/MSD recovery (58.5%)
T-6-EAST	2-Methylnaphthalene	J	poor field duplicate precision (74 RPD)
T-6-EAST	3,3'-Dichlorobenzidine	UJ	Low ave LCS/LCSD recovery (40.5%)
T-6-EAST	3-Nitroaniline	UJ	Low ave LCS/LCSD recovery (38.5%); Low ave MS/MSD recovery (55.5%)
T-6-EAST	4-Chloroaniline	UJ	Low ave LCS/LCSD recovery (26.5%); Low ave MS/MSD recovery (45%)
T-6-EAST	Acenaphthylene	J	large difference between field duplicate pair (> 3 x MQL)
T-6-EAST	Aniline	UJ	Low ave LCS/LCSD recovery (45.5%)
T-6-EAST	Anthracene	J	result between SDL and SQL
T-6-EAST	Benzaldehyde	R	Extremely low ave LCS/LCSD recovery (8.5%); Low ave MS/MSD recovery (9%); calibration drift (%D= -27)
T-6-EAST	Benzidine	UJ	poor calibration fit (%RSD=39); calibration drift (%D= -24)
T-6-EAST	Benzoic acid	UJ	calibration drift (%D= -21); Low ave MS/MSD recovery (51.5%)
T-6-EAST	Biphenyl	J	result between SDL and SQL
T-6-EAST	Fluoranthene	J	result between SDL and SQL
T-6-EAST	m,p-Cresol	J	result between SDL and SQL
T-6-EAST	o-Cresol	J	result between SDL and SQL
T-6-EAST	Pyrene	J	calibration drift (%D= 27); result between SDL and SQL
T-6-EAST	Pyridine	UJ	Low ave MS/MSD recovery (59%)
T-6-FLOOR	2-Chloroethylvinyl ether	UJ	low instrument response (low RRF), elevate SDL for NDs 210x (RV)
T-6-FLOOR	Acrolein	UJ	low instrument response (low RRF), elevate SDL for NDs 50x (RV); Low ave MS/MSD recovery (13.5%)

## QUALIFIED DATA TABLE

Field Sample Identification	Analyte	Data Qualifier	Reason for Qualification
T-6-FLOOR	Isopropylbenzene (Cumene)	J	poor field duplicate precision (57 RPD)
T-6-FLOOR	n-Butyl alcohol	UJ	low instrument response (low RRF), elevate SDL for NDs 3x (RV)
T-6-FLOOR	tert-Butyl methyl ether (MTBE)	J	result between SDL and SQL
T-6-FLOOR	2,4-Dinitrophenol	UJ	poor calibration fit (%RSD=31); Low ave MS/MSD recovery (58.5%)
T-6-FLOOR	3,3'-Dichlorobenzidine	UJ	Low ave LCS/LCSD recovery (40.5%)
T-6-FLOOR	3-Nitroaniline	UJ	Low ave LCS/LCSD recovery (38.5%); Low ave MS/MSD recovery (55.5%)
T-6-FLOOR	4-Chloroaniline	UJ	Low ave LCS/LCSD recovery (26.5%); Low ave MS/MSD recovery (45%)
T-6-FLOOR	Acenaphthylene	UJ	large difference between field duplicate pair (> 3 x MQL)
T-6-FLOOR	Acetophenone	J	result between SDL and SQL
T-6-FLOOR	Aniline	UJ	Low ave LCS/LCSD recovery (45.5%)
T-6-FLOOR	Benzaldehyde	R	Extremely low ave LCS/LCSD recovery (8.5%); Low ave MS/MSD recovery (9%); calibration drift (%D= -27)
T-6-FLOOR	Benzidine	UJ	poor calibration fit (%RSD=39); calibration drift (%D= -24)
T-6-FLOOR	Benzoic acid	UJ	calibration drift (%D= -21); Low ave MS/MSD recovery (51.5%)
T-6-FLOOR	Di-n-butyl phthalate	J	result between SDL and SQL
T-6-FLOOR	Pyridine	UJ	Low ave MS/MSD recovery (59%)
T-6-NORTH	1,1,1-Trichloroethane	J	result between SDL and SQL
T-6-NORTH	1,2,4-Trimethylbenzene	J	result between SDL and SQL
T-6-NORTH	1,3,5-Trimethylbenzene	J	result between SDL and SQL
T-6-NORTH	2-Chloroethylvinyl ether	UJ	low instrument response (low RRF), elevate SDL for NDs 210x (RV)
T-6-NORTH	Acrolein	UJ	low instrument response (low RRF), elevate SDL for NDs 50x (RV); Low ave MS/MSD recovery (13.5%)
T-6-NORTH	Cyclohexane	J	result between SDL and SQL
T-6-NORTH	Isopropylbenzene (Cumene)	J	poor field duplicate precision (57 RPD); result between SDL and SQL
T-6-NORTH	n-Butyl alcohol	UJ	low instrument response (low RRF), elevate SDL for NDs 3x (RV)
T-6-NORTH	n-Propylbenzene	J	result between SDL and SQL
T-6-NORTH	Toluene	J	result between SDL and SQL
T-6-NORTH	Trichloroethene	J	result between SDL and SQL
T-6-NORTH	2,4-Dinitrophenol	UJ	poor calibration fit (%RSD=31); Low ave MS/MSD recovery (58.5%)
T-6-NORTH	3,3'-Dichlorobenzidine	UJ	Low ave LCS/LCSD recovery (40.5%)
T-6-NORTH	3-Nitroaniline	UJ	Low ave LCS/LCSD recovery (38.5%); Low ave MS/MSD recovery (55.5%)
T-6-NORTH	4-Chloroaniline	UJ	Low ave LCS/LCSD recovery (26.5%); Low ave MS/MSD recovery (45%)
T-6-NORTH	Acenaphthylene	J	large difference between field duplicate pair (> 3 x MQL); result between SDL and SQL
T-6-NORTH	Aniline	UJ	Low ave LCS/LCSD recovery (45.5%)
T-6-NORTH	Benzaldehyde	R	Extremely low ave LCS/LCSD recovery (8.5%); Low ave MS/MSD recovery (9%); calibration drift (%D= -27)
T-6-NORTH	Benzidine	UJ	poor calibration fit (%RSD=39); calibration drift (%D= -24)
T-6-NORTH	Benzo(g,h,i)perylene	J	result between SDL and SQL
T-6-NORTH	Benzoic acid	UJ	calibration drift (%D= -21); Low ave MS/MSD recovery (51.5%)
T-6-NORTH	Chrysene	J	result between SDL and SQL
T-6-NORTH	Diethyl phthalate	J	result between SDL and SQL
T-6-NORTH	Fluoranthene	J	result between SDL and SQL
T-6-NORTH	Phenanthrene	J	result between SDL and SQL
T-6-NORTH	Phenol	J	result between SDL and SQL
T-6-NORTH	Pyridine	UJ	Low ave MS/MSD recovery (59%)

## QUALIFIED DATA TABLE

Field Sample Identification	Analyte	Data Qualifier	Reason for Qualification
T-6-SOUTH	2-Chloroethylvinyl ether	UJ	low instrument response (low RRF), elevate SDL for NDs 210x (RV)
T-6-SOUTH	Acrolein	UJ	low instrument response (low RRF), elevate SDL for NDs 50x (RV); Low ave MS/MSD recovery (13.5%)
T-6-SOUTH	Benzene	J	result between SDL and SQL
T-6-SOUTH	Chloroform	J	result between SDL and SQL
T-6-SOUTH	Isopropylbenzene (Cumene)	J	poor field duplicate precision (57 RPD)
T-6-SOUTH	Naphthalene	J	result between SDL and SQL
T-6-SOUTH	n-Butyl alcohol	UJ	low instrument response (low RRF), elevate SDL for NDs 3x (RV)
T-6-SOUTH	Styrene	J	result between SDL and SQL
T-6-SOUTH	Toluene	J	result between SDL and SQL
T-6-SOUTH	Xylene (total)	J	result between SDL and SQL
T-6-SOUTH	2,4-Dinitrophenol	UJ	poor calibration fit (%RSD=31); Low ave MS/MSD recovery (58.5%)
T-6-SOUTH	2-Methylnaphthalene	J	poor field duplicate precision (74 RPD)
T-6-SOUTH	3,3'-Dichlorobenzidine	UJ	Low ave LCS/LCSD recovery (40.5%)
T-6-SOUTH	3-Nitroaniline	UJ	Low ave LCS/LCSD recovery (38.5%); Low ave MS/MSD recovery (55.5%)
T-6-SOUTH	4-Chloroaniline	UJ	Low ave LCS/LCSD recovery (26.5%); Low ave MS/MSD recovery (45%)
T-6-SOUTH	Acenaphthene	J	result between SDL and SQL
T-6-SOUTH	Acenaphthylene	J	large difference between field duplicate pair (> 3 x MQL); result between SDL and SQL
T-6-SOUTH	Aniline	UJ	Low ave LCS/LCSD recovery (45.5%)
T-6-SOUTH	Benzaldehyde	R	Extremely low ave LCS/LCSD recovery (8.5%); Low ave MS/MSD recovery (9%); calibration drift (%D= -27)
T-6-SOUTH	Benidine	UJ	poor calibration fit (%RSD=39); calibration drift (%D= -24)
T-6-SOUTH	Benzoic acid	UJ	calibration drift (%D= -21); Low ave MS/MSD recovery (51.5%)
T-6-SOUTH	Biphenyl	J	result between SDL and SQL
T-6-SOUTH	Di-n-butyl phthalate	J	result between SDL and SQL
T-6-SOUTH	Fluoranthene	J	result between SDL and SQL
T-6-SOUTH	m,p-Cresol	J	result between SDL and SQL
T-6-SOUTH	o-Cresol	J	result between SDL and SQL
T-6-SOUTH	Pyridine	UJ	Low ave MS/MSD recovery (59%)

## ATTACHMENT 1

Sample_ID	Lab_Sample_ID	Test_type_code	Analytical_Method	Total_or_dissolved	Matrix	Parameter	Valid_qualifier	Result_type_code	Prep_date	Prep_time	Analysis_Date	Analysis_Time	QC_comment	QC_Batch
x	a8914	ICAL2	SW8260B			n-Butyl alcohol	J / UJ to RRs/NDs	TRG			1/14/2011	11:41	low instrument response (low RRF), elevate SDL for NDs 3x (TR)	
x	a8933	ICAL1	SW8260B			Acrolein	J / UJ to RRs/NDs	TRG			11/14/2011	11:09	low instrument response (low RRF), elevate SDL for NDs 50x (TR)	
x	a8933	ICAL1	SW8260B			2-Chloroethyl vinyl ether	J / UJ to RRs/NDs	TRG			11/14/2011	11:09	low instrument response (low RRF), elevate SDL for NDs 210x (TR)	
x	k9746	ICAL2	SW8260B			n-Butyl alcohol	J / UJ to RRs/NDs	TRG			1/7/2011	11:14	low instrument response (low RRF), elevate SDL for NDs 1.4x (TR)	
x	k9758	ICAL1	SW8260B			Acrolein	J / UJ to RRs/NDs	TRG			1/7/2011	18:08	low instrument response (low RRF), elevate SDL for NDs 13x (TR)	
x	a8960	CCV1	SW8260B			Acrolein	J+ to RRs (none)	VOC			1/16/2011	9:23	calibration drift (%D= 24)	
x	a8960	CCV1	SW8260B			2-Hexanone	J+ to RRs (none)	VOC			1/16/2011	9:23	calibration drift (%D= 21)	
x	k9905	CCV1	SW8260B			Vinyl acetate	J- / UJ to RRs/NDs	VOC			1/18/2011	13:19	calibration drift (%D= -27)	
T-15-F MSD	21101140503	MSD	SW8260B		S	Acrolein	J- / UJ to RRs/NDs	TRG			1/16/2011	14:25	Low ave MS/MSD recovery (13.5%)	449013
T-15-F MSD	21101140503	MSD	SW8260B		S	Acrolein	J to RRs (none)	TRG			1/16/2011	14:25	poor MS/MSD precision (80 RPD)	449013
T-15-F MSD	21101140503	MSD	SW8260B		S	Chloroethane	J to RRs (none)	TRG			1/16/2011	14:25	poor MS/MSD precision (42 RPD)	449013
BLIND DUP	21101140511	FLDDUP	SW8260B		S	Isopropylbenzene (Cumene)	J to RRs	TRG			1/16/2011	19:46	poor field duplicate precision (57 RPD)	449013
x	e7897	ICAL1	SW8270C			2,4-Dinitrophenol	J / UJ to RRs/NDs	TRG			1/12/2011	8:21	poor calibration fit (%RSD=31)	
x	e7897	ICAL1	SW8270C			Benzidine	J / UJ to RRs/NDs	TRG			1/12/2011	8:21	poor calibration fit (%RSD=39)	
x	e7972	CCV1	SW8270C			Benzoic acid	J- / UJ to RRs/NDs	SVOC			1/14/2011	14:42	calibration drift (%D= -21)	
x	e7972	CCV1	SW8270C			Hexachlorocyclopentadiene	J+ to RRs (none)	SVOC			1/14/2011	14:42	calibration drift (%D= 24)	
x	e7972	CCV1	SW8270C			Benzidine	J- / UJ to RRs/NDs	SVOC			1/14/2011	14:42	calibration drift (%D= -24)	
x	e8008	CCV1	SW8270C			Hexachlorocyclopentadiene	J+ to RRs (none)	SVOC			1/17/2011	8:28	calibration drift (%D= 25)	
x	e8008	CCV1	SW8270C			Benzidine	J- / UJ to RRs/NDs	SVOC			1/17/2011	8:28	calibration drift (%D= -44)	

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Sample_ID	Lab_Sample_ID	Test_type_code	Analytical_Method	Total_or_dissolved	Matrix	Parameter	Valid_qualifier	Result_type_code	Prep_date	Prep_time	Analysis_Date	Analysis_Time	QC_comment	QC_Batch
x	e8008	CCV1	SW8270C			Pyrene	J+ to RRs	SVOC			1/17/2011	8:28	calibration drift (%D= 27)	
x	e8008	CCV1	SW8270C			Benzaldehyde	J- / UJ to RRs/NDs	SVOC			1/17/2011	8:28	calibration drift (%D= -27)	
LCSD for HBN 448916 [EXTO/2751]	912492	LCSD	SW8270C		S	3,3'-Dichlorobenzidine	J- / UJ to RRs/NDs	TRG	1/14/2011	10:30	1/14/2011	16:39	Low ave LCS/LCSD recovery (40.5%)	448983
LCSD for HBN 448916 [EXTO/2751]	912492	LCSD	SW8270C		S	3-Nitroaniline	J- / UJ to RRs/NDs	TRG	1/14/2011	10:30	1/14/2011	16:39	Low ave LCS/LCSD recovery (38.5%)	448983
LCSD for HBN 448916 [EXTO/2751]	912492	LCSD	SW8270C		S	4-Chloroaniline	J- / UJ to RRs/NDs	TRG	1/14/2011	10:30	1/14/2011	16:39	Low ave LCS/LCSD recovery (26.5%)	448983
LCSD for HBN 448916 [EXTO/2751]	912492	LCSD	SW8270C		S	Aniline	J- / UJ to RRs/NDs	TRG	1/14/2011	10:30	1/14/2011	16:39	Low ave LCS/LCSD recovery (45.5%)	448983
LCSD for HBN 448916 [EXTO/2751]	912492	LCSD	SW8270C		S	Benzaldehyde	J- / R to RRs/NDs	TRG	1/14/2011	10:30	1/14/2011	16:39	Extremely low ave LCS/LCSD recovery (8.5%)	448983
T-15-F MSD	21101140503	MSD	SW8270C		S	2,4-Dinitrophenol	J- / UJ to RRs/NDs	TRG	1/14/2011	10:30	1/14/2011	17:29	Low ave MS/MSD recovery (58.5%)	448983
T-15-F MSD	21101140503	MSD	SW8270C		S	3-Nitroaniline	J- / UJ to RRs/NDs	TRG	1/14/2011	10:30	1/14/2011	17:29	Low ave MS/MSD recovery (55.5%)	448983
T-15-F MSD	21101140503	MSD	SW8270C		S	4-Chloroaniline	J- / UJ to RRs/NDs	TRG	1/14/2011	10:30	1/14/2011	17:29	Low ave MS/MSD recovery (45%)	448983
T-15-F MSD	21101140503	MSD	SW8270C		S	Benzaldehyde	J- / UJ to RRs/NDs	TRG	1/14/2011	10:30	1/14/2011	17:29	Low ave MS/MSD recovery (9%)	448983
T-15-F MSD	21101140503	MSD	SW8270C		S	Benzoic acid	J- / UJ to RRs/NDs	TRG	1/14/2011	10:30	1/14/2011	17:29	Low ave MS/MSD recovery (51.5%)	448983
T-15-F MSD	21101140503	MSD	SW8270C		S	Pyridine	J- / UJ to RRs/NDs	TRG	1/14/2011	10:30	1/14/2011	17:29	Low ave MS/MSD recovery (59%)	448983
LCSD for HBN 448916 [EXTO/2751]	912492	LCSD	SW8270C		S	Aniline	J to RRs (none)	TRG	1/14/2011	10:30	1/14/2011	16:39	poor LCS/LCSD precision (62 RPD)	448983
T-21-F	21101140504	SMP	SW8270C		S	2-Fluorobiphenyl	none (surrogate diluted out)	SUR	1/14/2011	10:30	1/17/2011	8:56	extremely low SU recovery (0%)	449083
T-21-F	21101140504	SMP	SW8270C		S	2-Fluorophenol	none (surrogate diluted out)	SUR	1/14/2011	10:30	1/17/2011	8:56	extremely low SU recovery (0%)	449083
T-21-F	21101140504	SMP	SW8270C		S	Terphenyl-d14	none (surrogate diluted out)	SUR	1/14/2011	10:30	1/17/2011	8:56	extremely low SU recovery (0%)	449083
T-21-F	21101140504	SMP	SW8270C		S	Nitrobenzene-d5	none (surrogate diluted out)	SUR	1/14/2011	10:30	1/17/2011	8:56	extremely low SU recovery (0%)	449083
T-21-F	21101140504	SMP	SW8270C		S	2,4,6-Tribromophenol	none (surrogate diluted out)	SUR	1/14/2011	10:30	1/17/2011	8:56	extremely low SU recovery (0%)	449083

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Sample_ID	Lab_Sample_ID	Test_type_code	Analytical_Method	Total_or_dissolved	Matrix	Parameter	Valid_qualifier	Result_type_code	Prep_date	Prep_time	Analysis_Date	Analysis_Time	QC_comment	QC_Batch
T-21-F	21101140504	SMP	SW8270C		S	Phenol-d5	none (surrogate diluted out)	SUR	1/14/2011	10:30	1/17/2011	8:56	extremely low SU recovery (0%)	449083
SC-E	21101140513	SMP	SW8270C		S	2,4,6-Tribromophenol	none (only one of multiple surrogates deficient)	SUR	1/14/2011	10:30	1/14/2011	20:16	low SU recovery (59%)	448983
EQUIPMENT BLANK	21101140514	EQBK	SW8270C		W	Phenol-d5	none (only one of multiple surrogates deficient)	SUR	1/14/2011	11:35	1/14/2011	15:49	low SU recovery (41%)	448983
BLIND DUP	21101140511	FLDDUP	SW8270C		S	2-Methylnaphthalene	J to RRs	TRG	1/14/2011	10:30	1/14/2011	19:43	poor field duplicate precision (74 RPD)	448983
BLIND DUP	21101140511	FLDDUP	SW8270C		S	Acenaphthylene	J / UJ to RRs/NDs	TRG	1/14/2011	10:30	1/14/2011	19:43	large difference between field duplicate pair (> 3 x MQL)	448983